



1/64

STEP : 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.

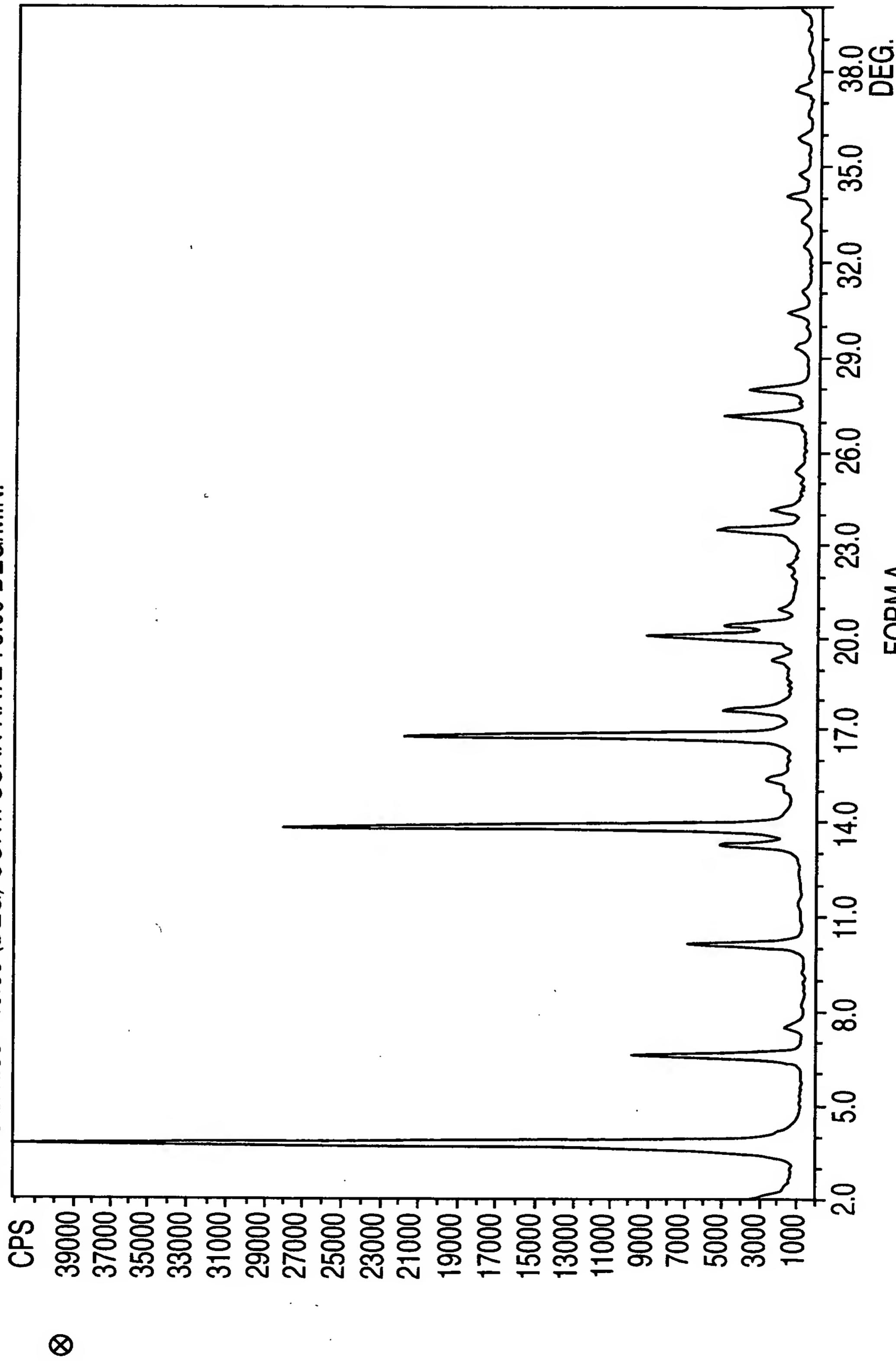


FIG. 1  
FORM A

STEP : 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CNT. SCAN RATE : 3.00 DEG/MIN.

⊗

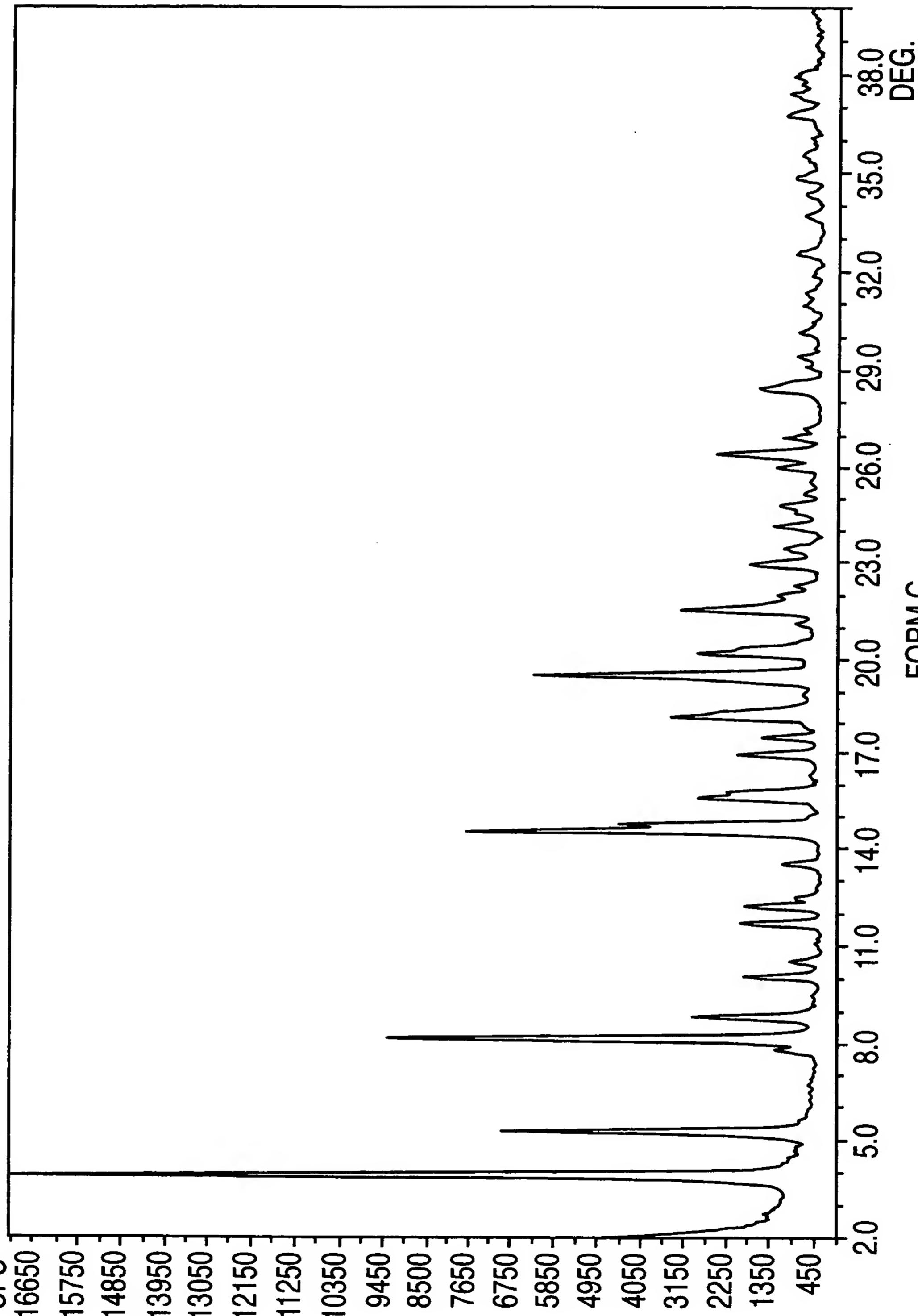
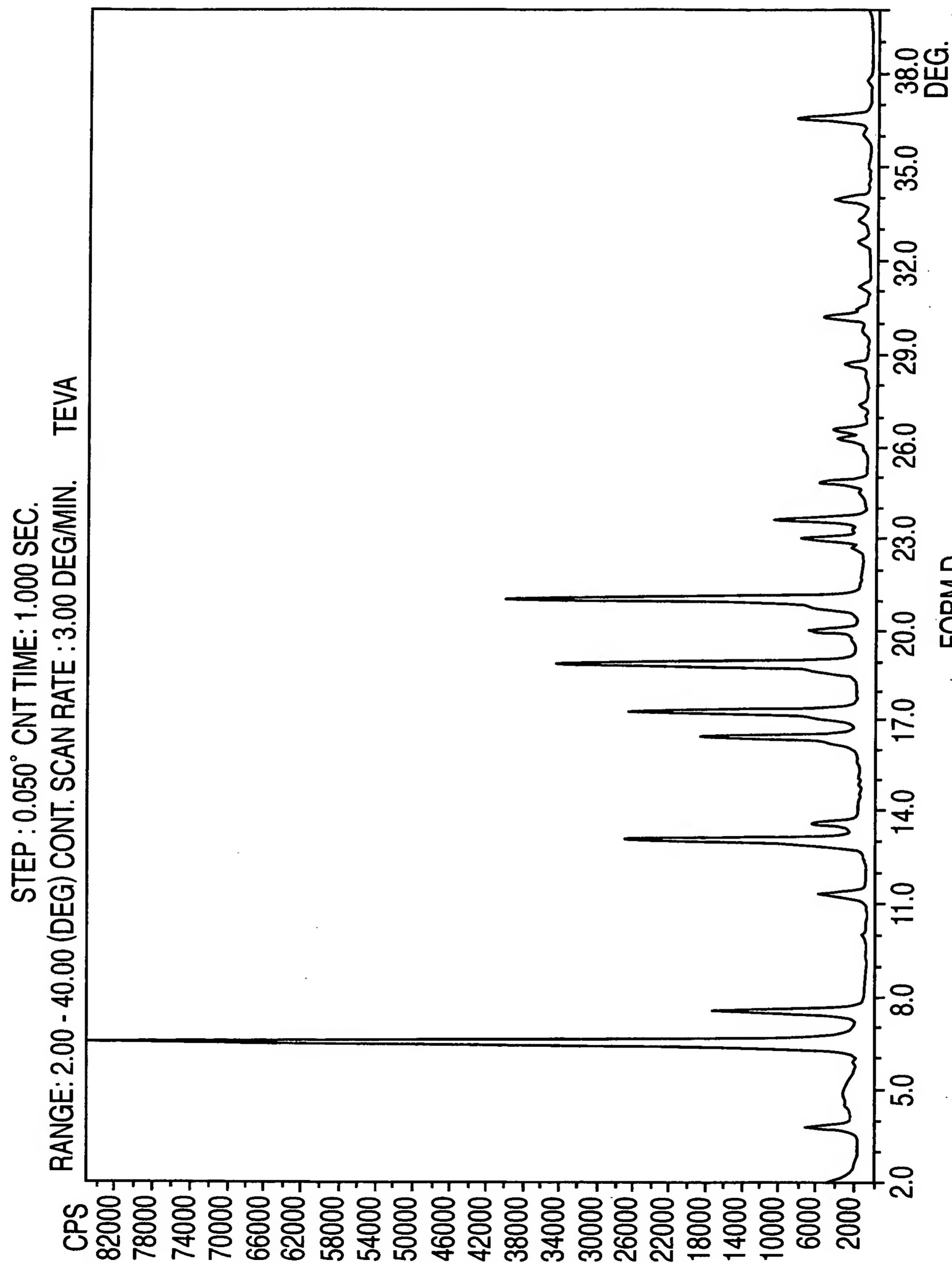
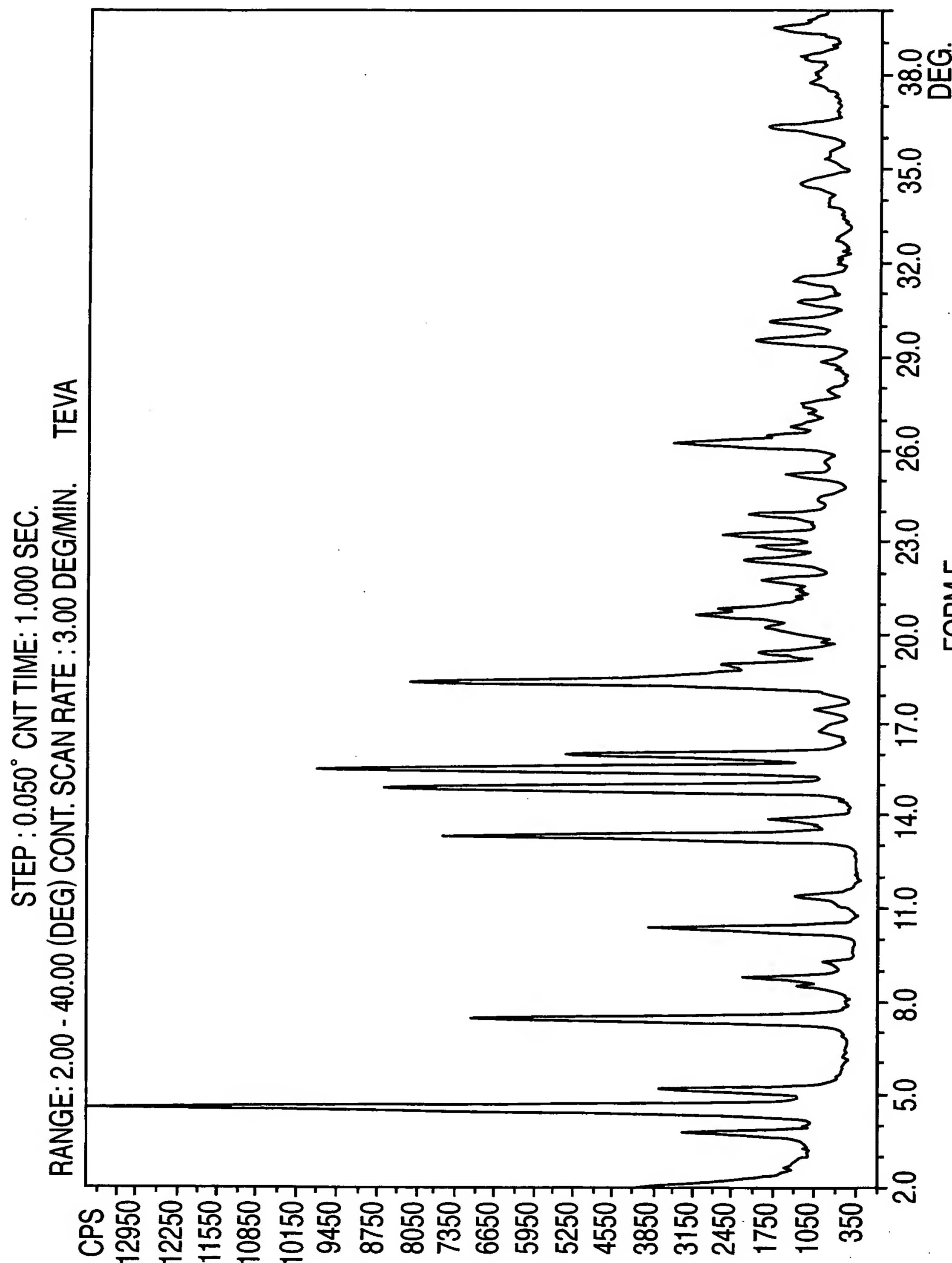
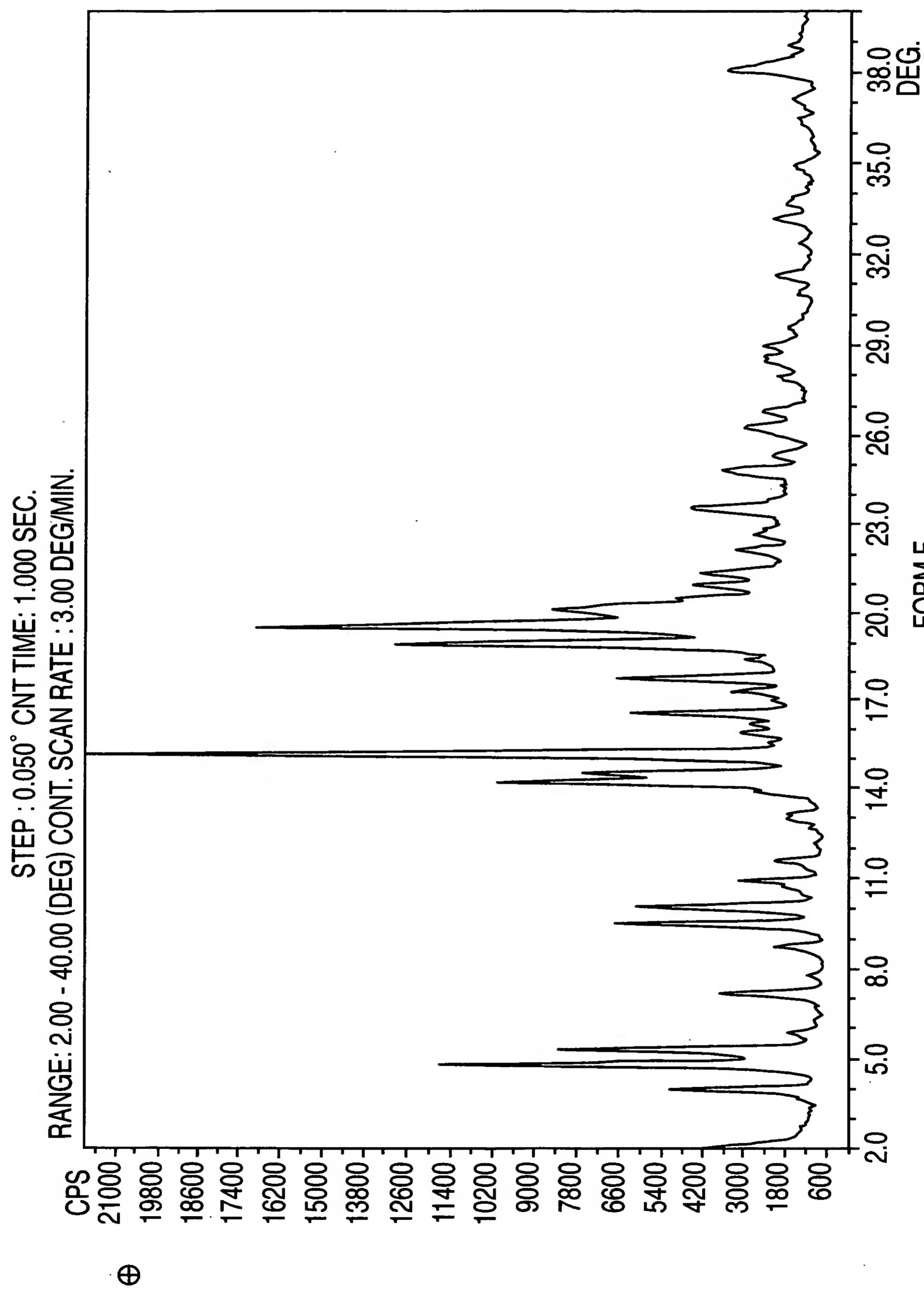


FIG. 2  
FORM C

FORM D  
**FIG. 3**





STEP : 0.050° CNT TIME: 1.000 SEC.  
CPS RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.

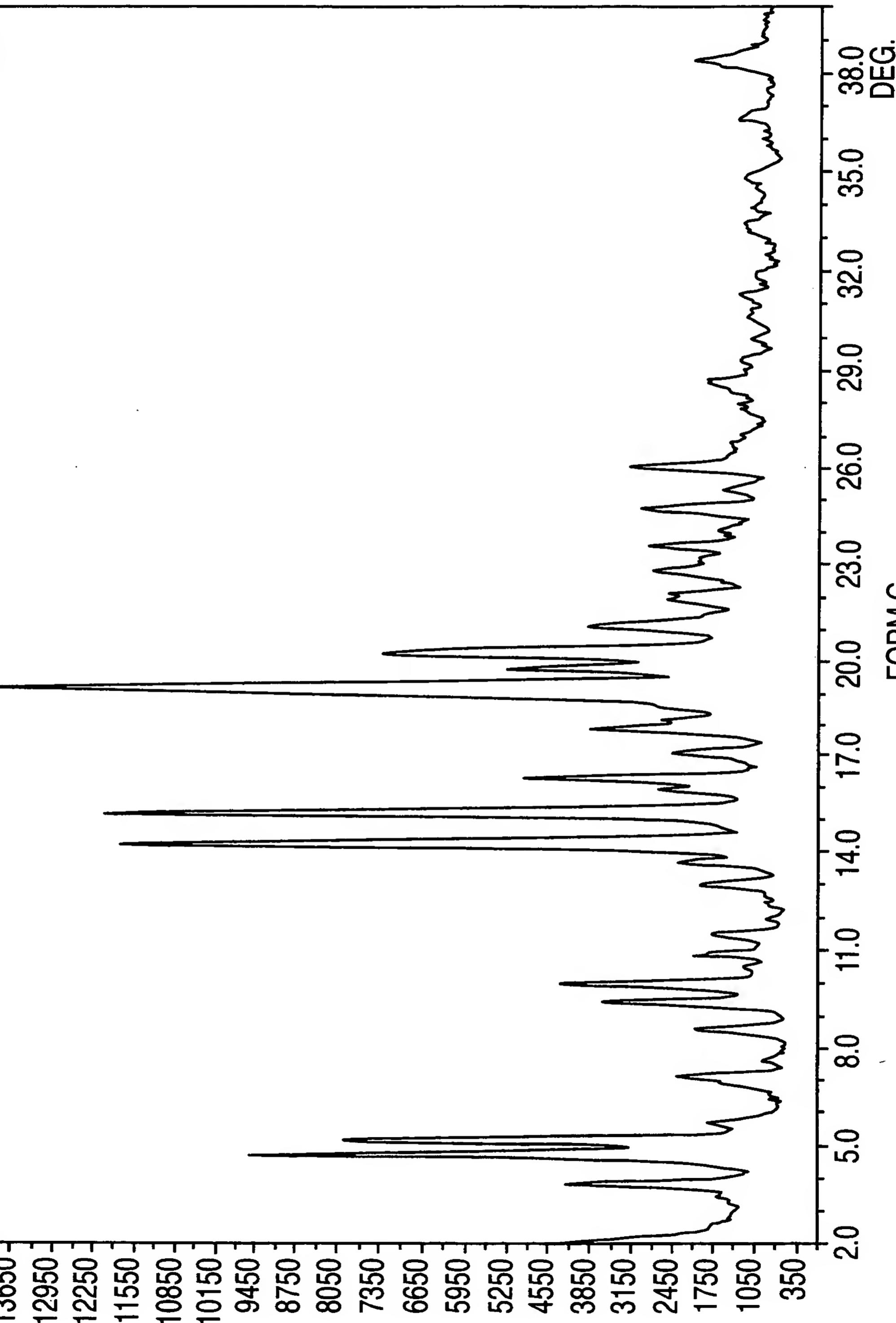


FIG. 6  
FORM G

7/64

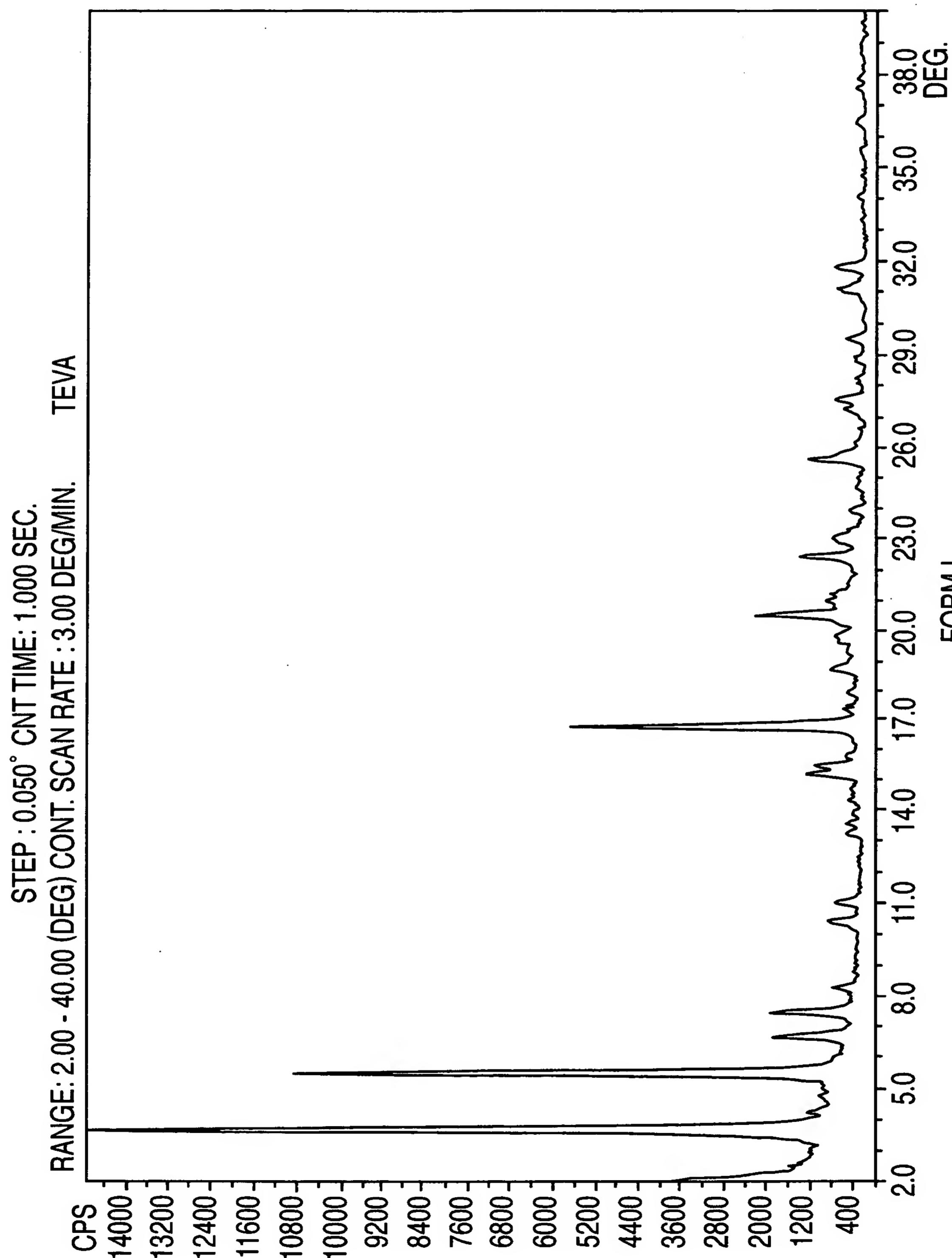


FIG. 7  
FORM I

STEP : 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.

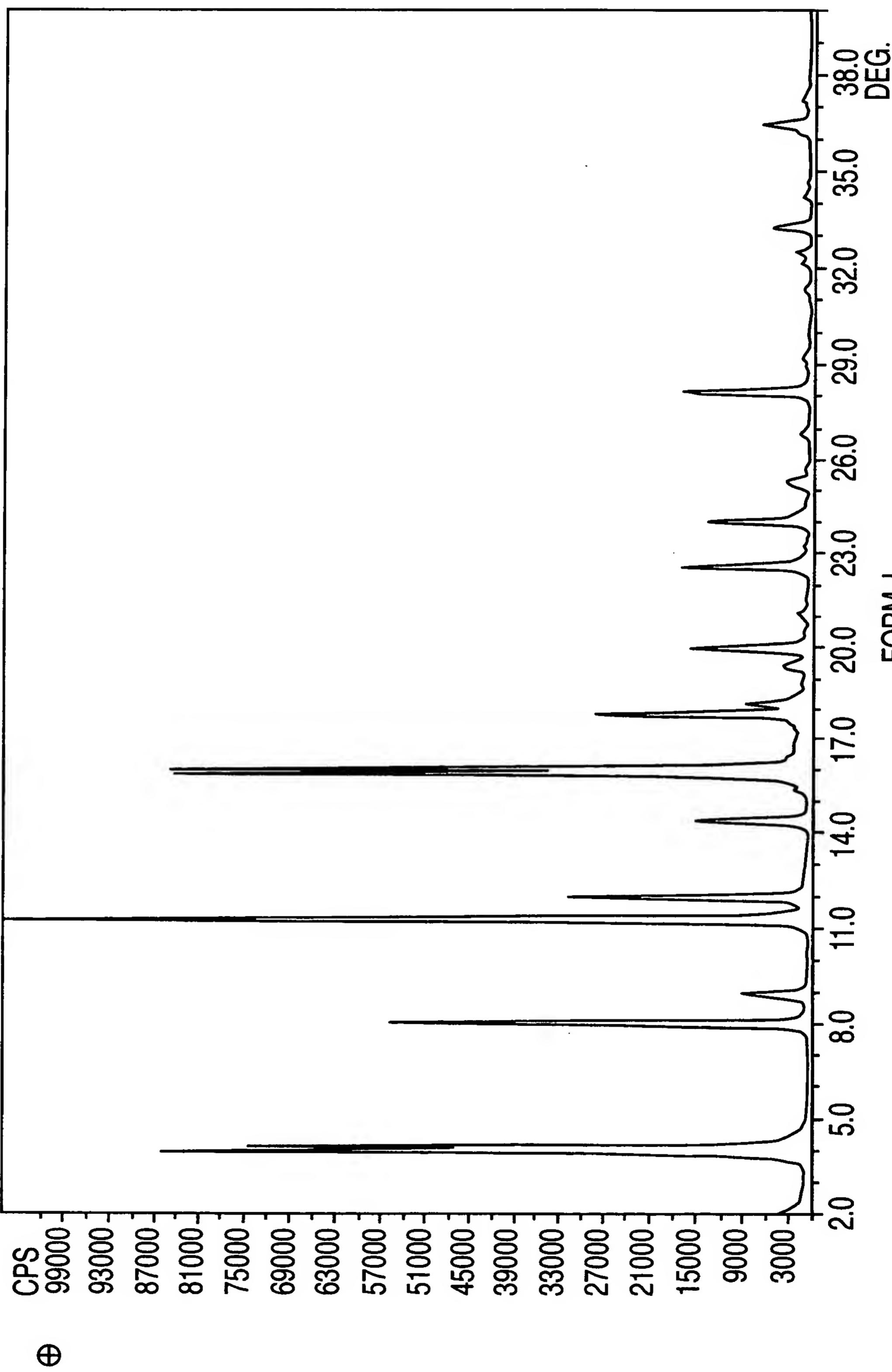


FIG. 8  
FORM J

9/64

STEP : 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CNT. SCAN RATE : 3.00 DEG/MIN.

⊕

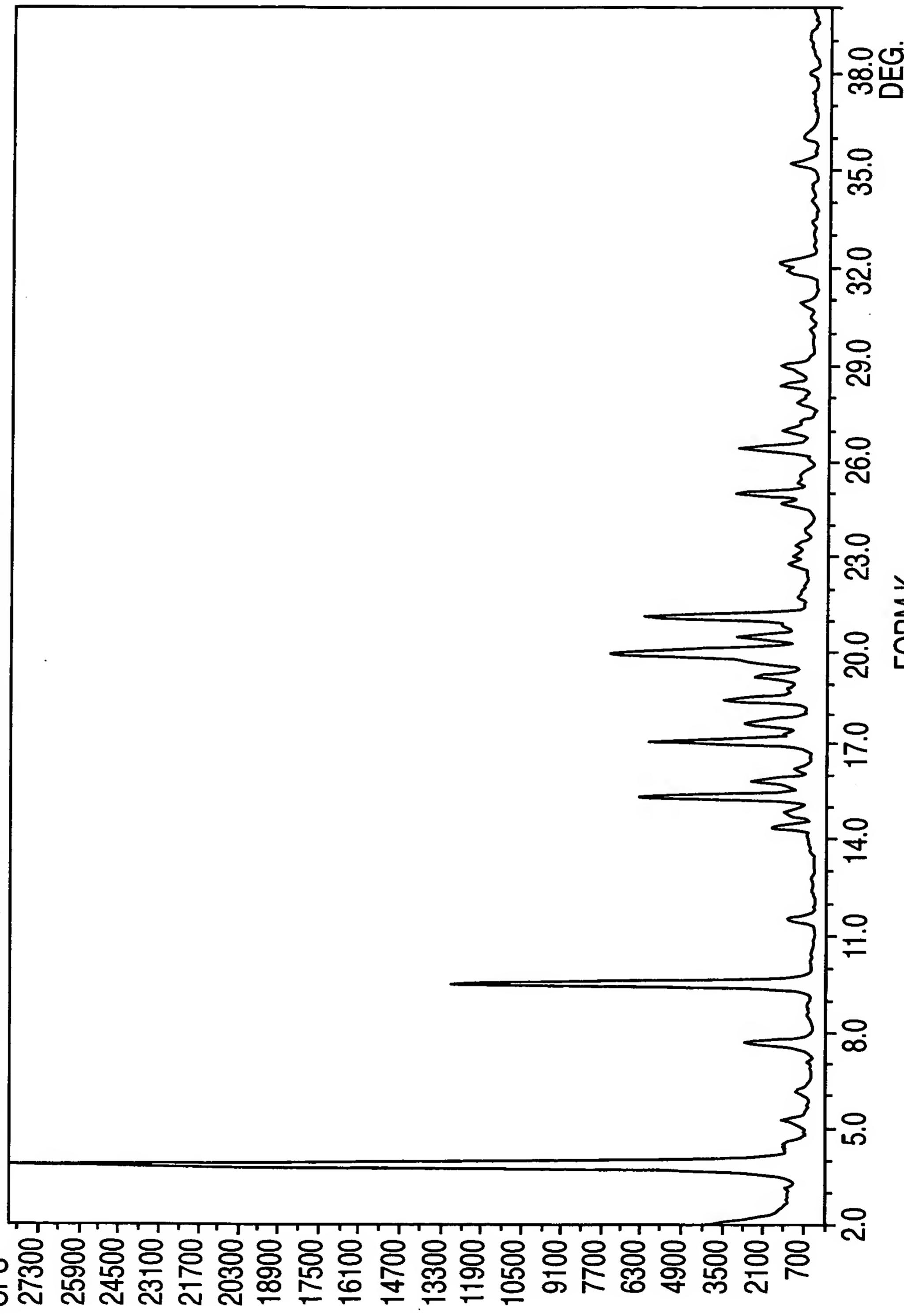


FIG. 9  
FORM K

10/64

STEP : 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CNT. SCAN RATE : 3.00 DEG/MIN.

⊕

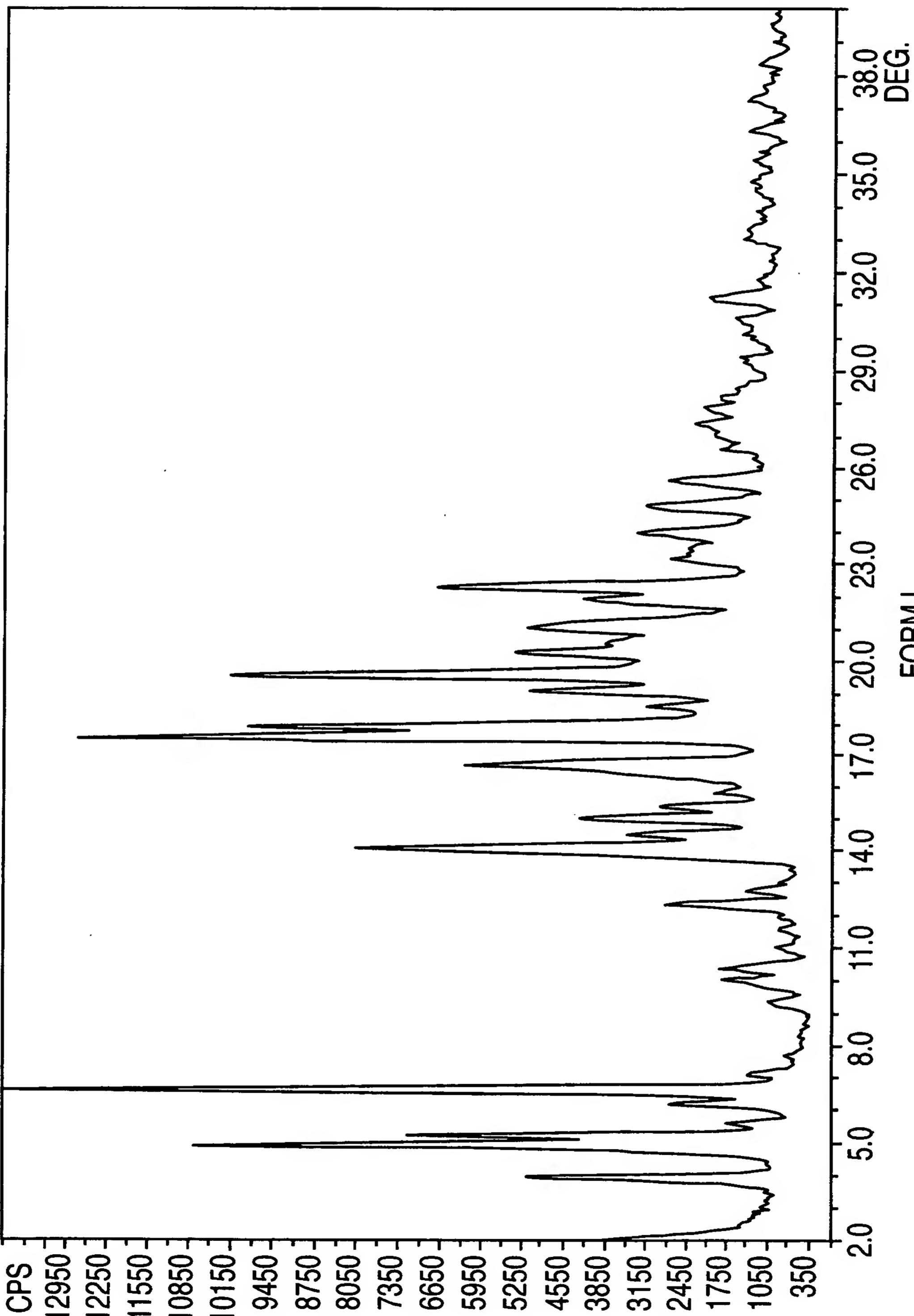


FIG. 10  
FORM L

11/64

STEP : 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.

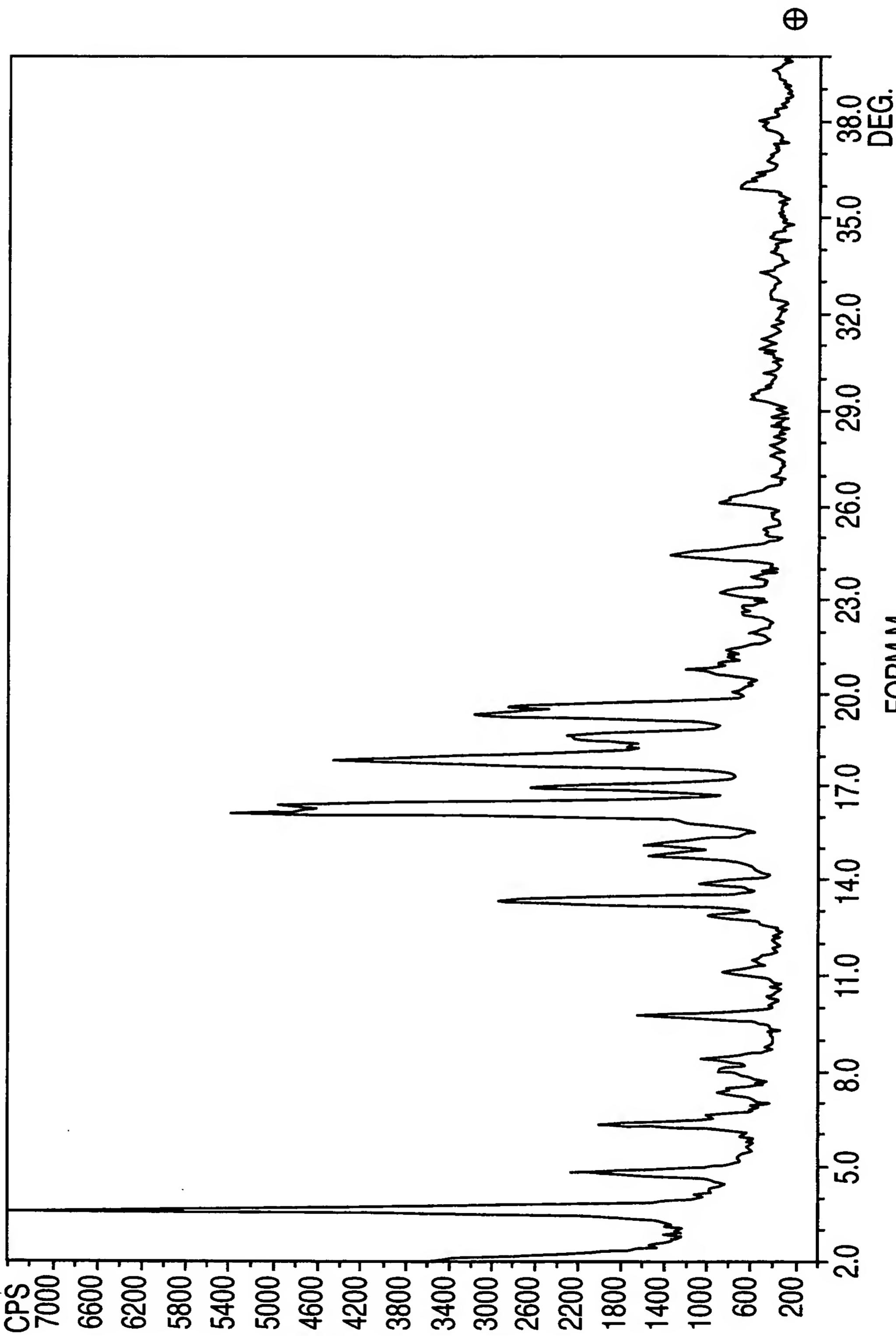


FIG. 11  
FORM M

STEP : 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.

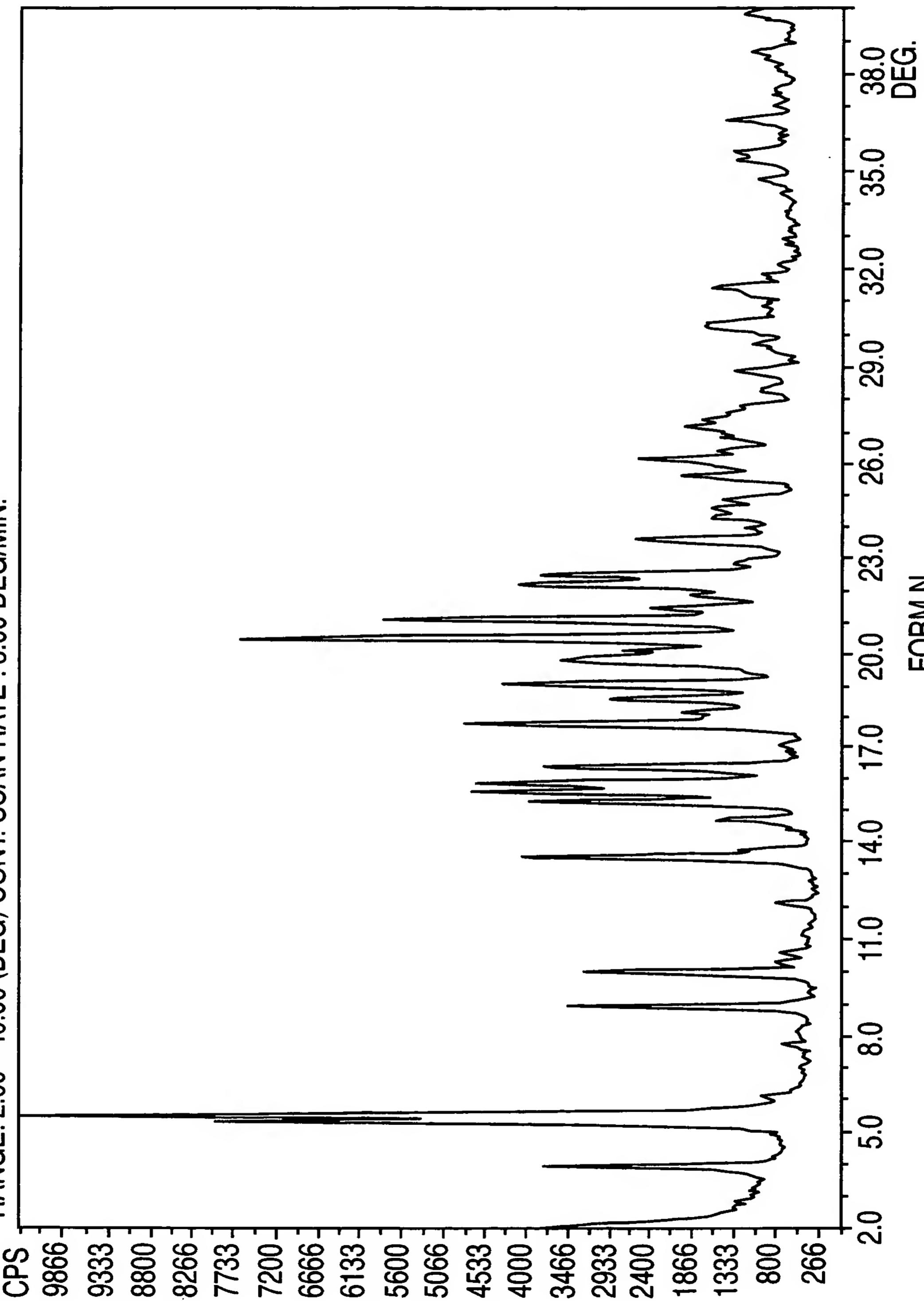


FIG. 12

13/64

⊗

STEP : 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.

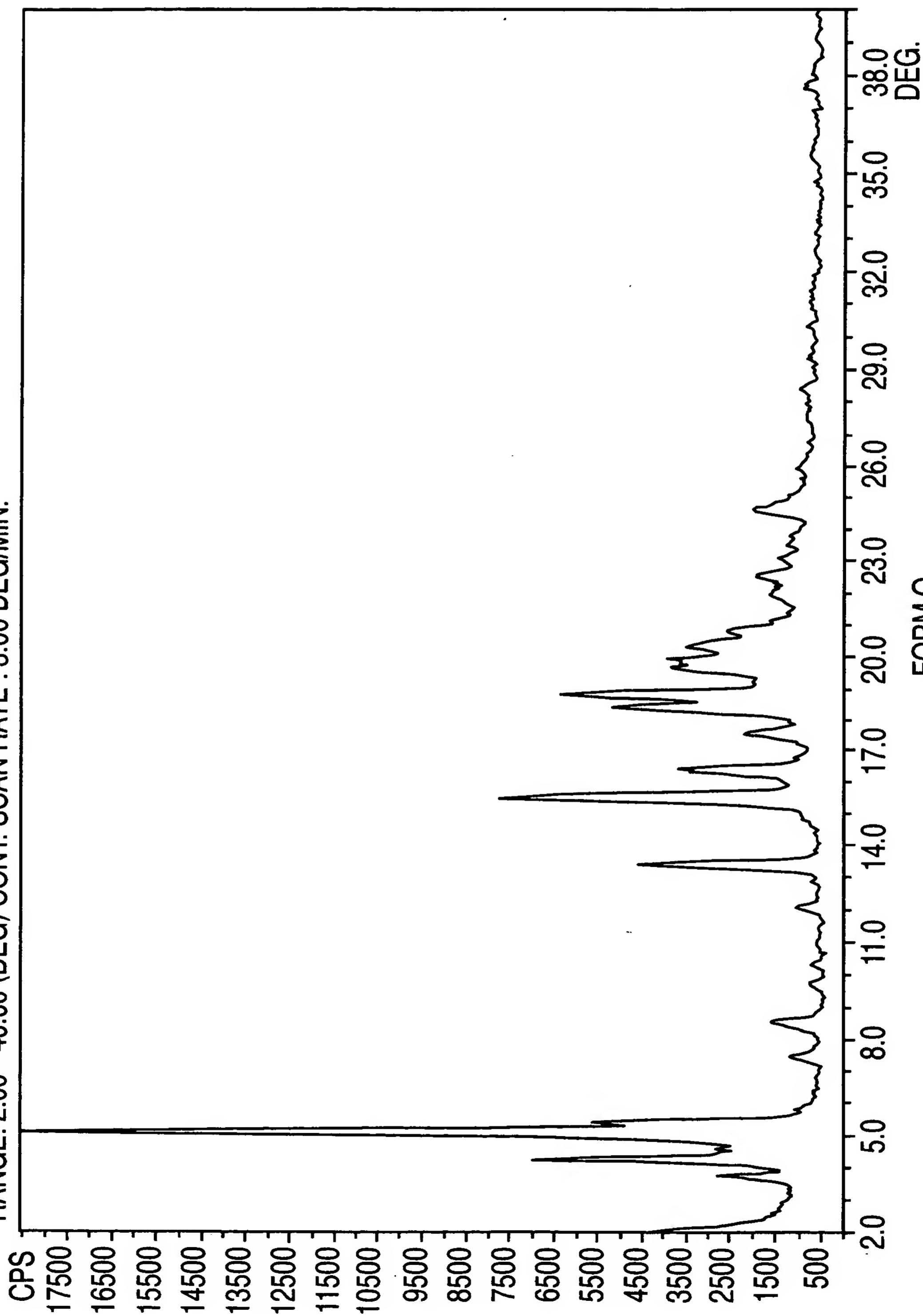


FIG. 13  
FORM 0

14/64

⊗

STEP : 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.

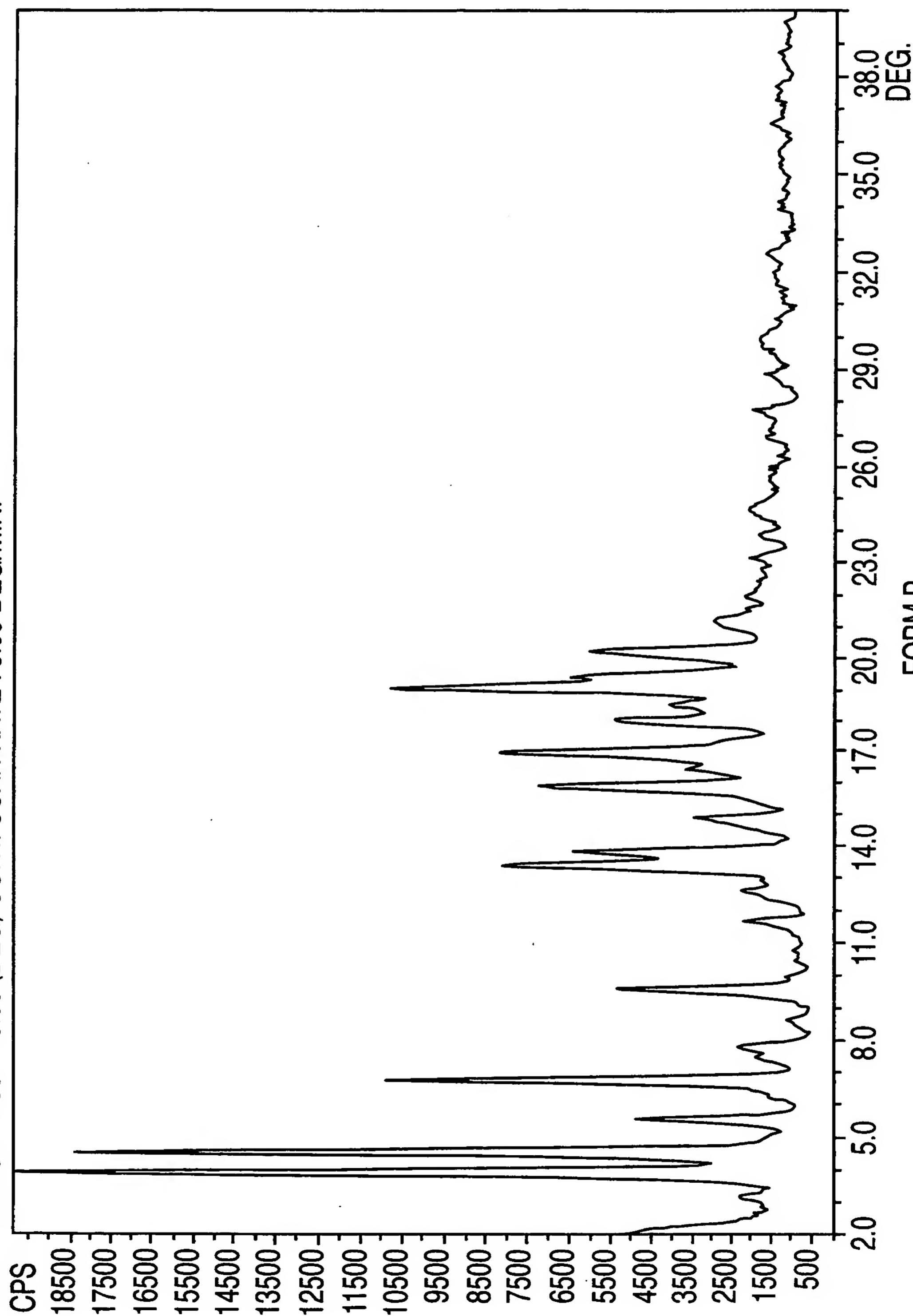


FIG. 14

15/64

⊗

STEP : 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.

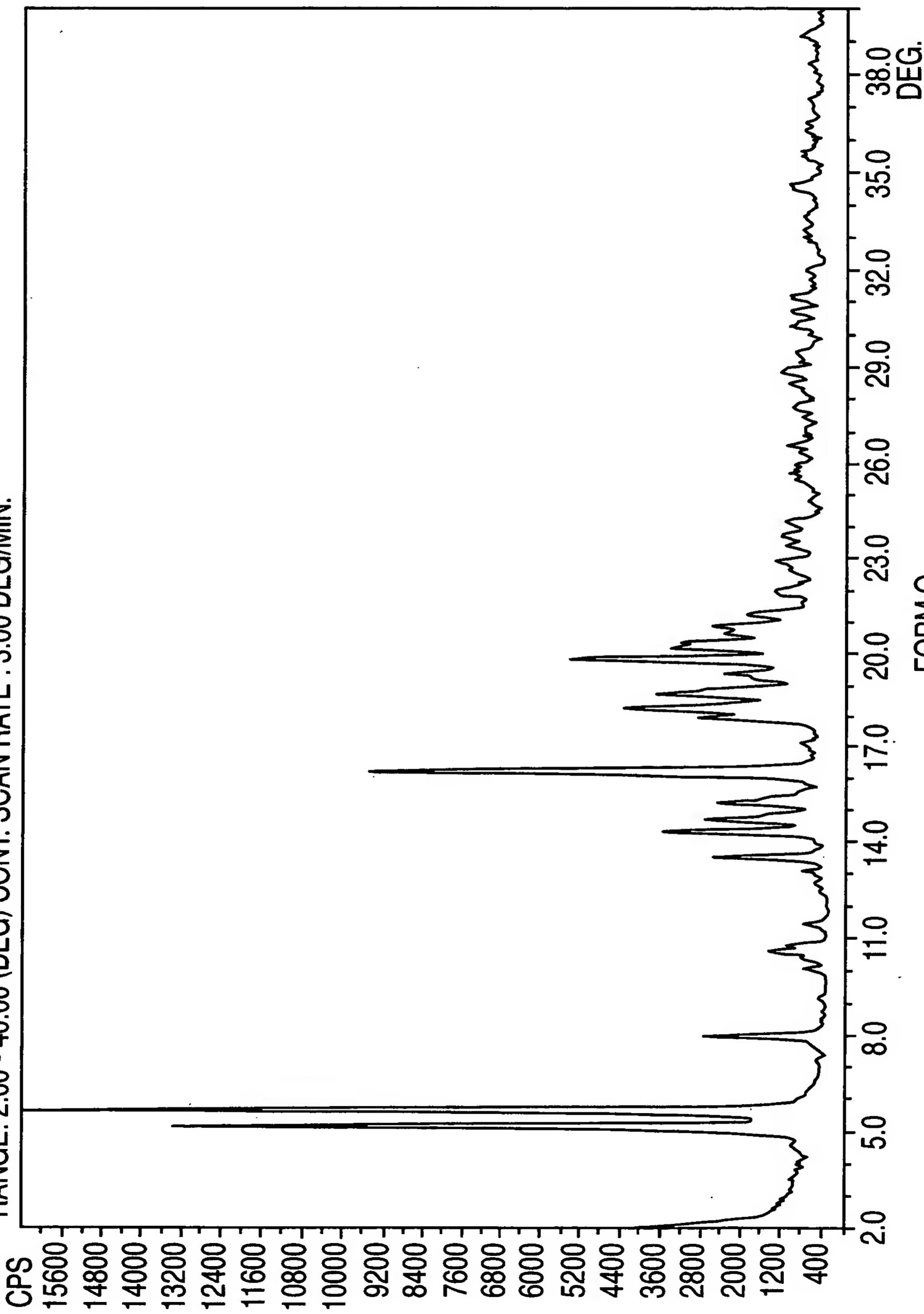


FIG. 15

16/64

⊕

STEP : 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.

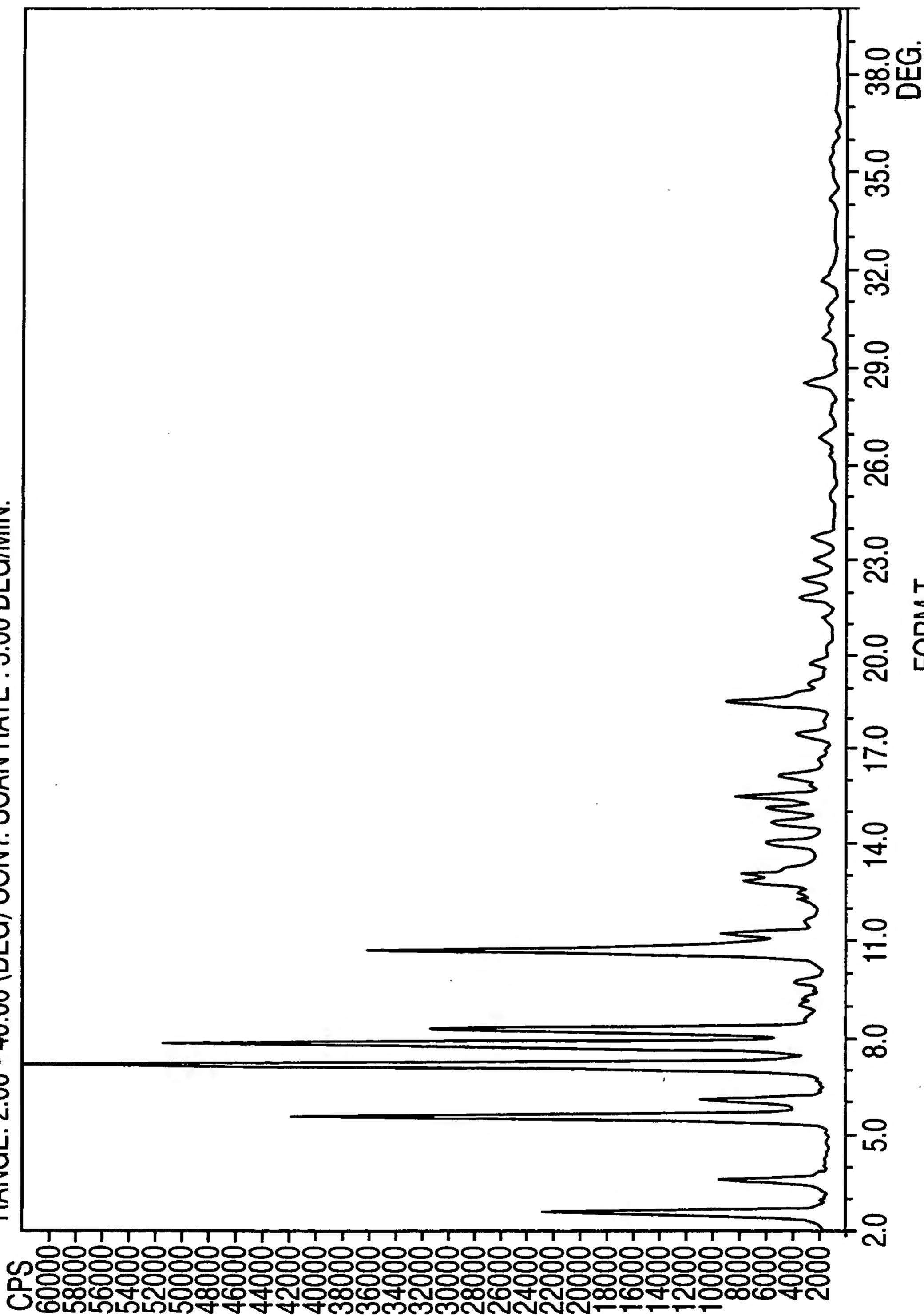


FIG. 16  
FORMAT

17/64

STEP : 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.

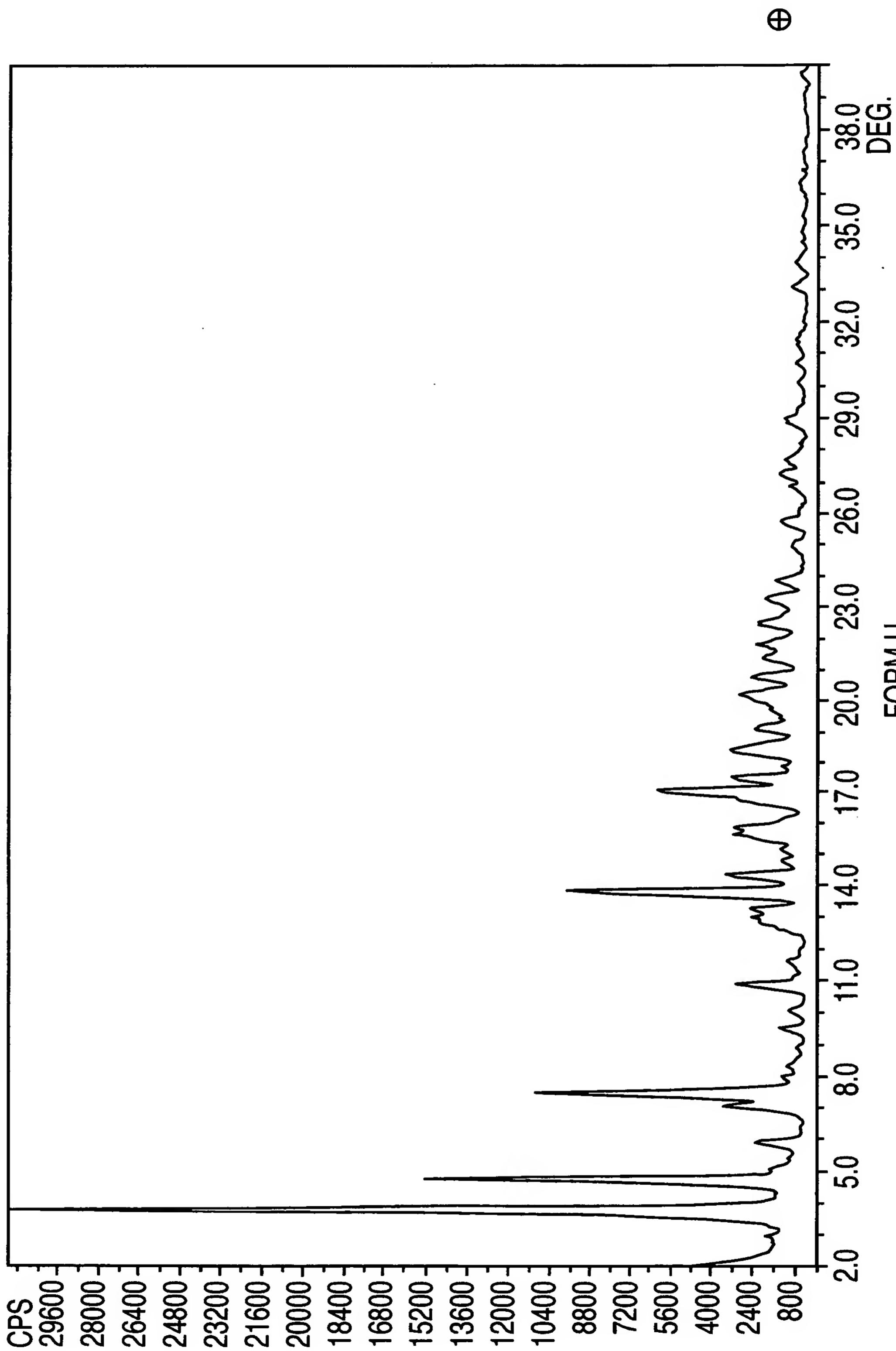
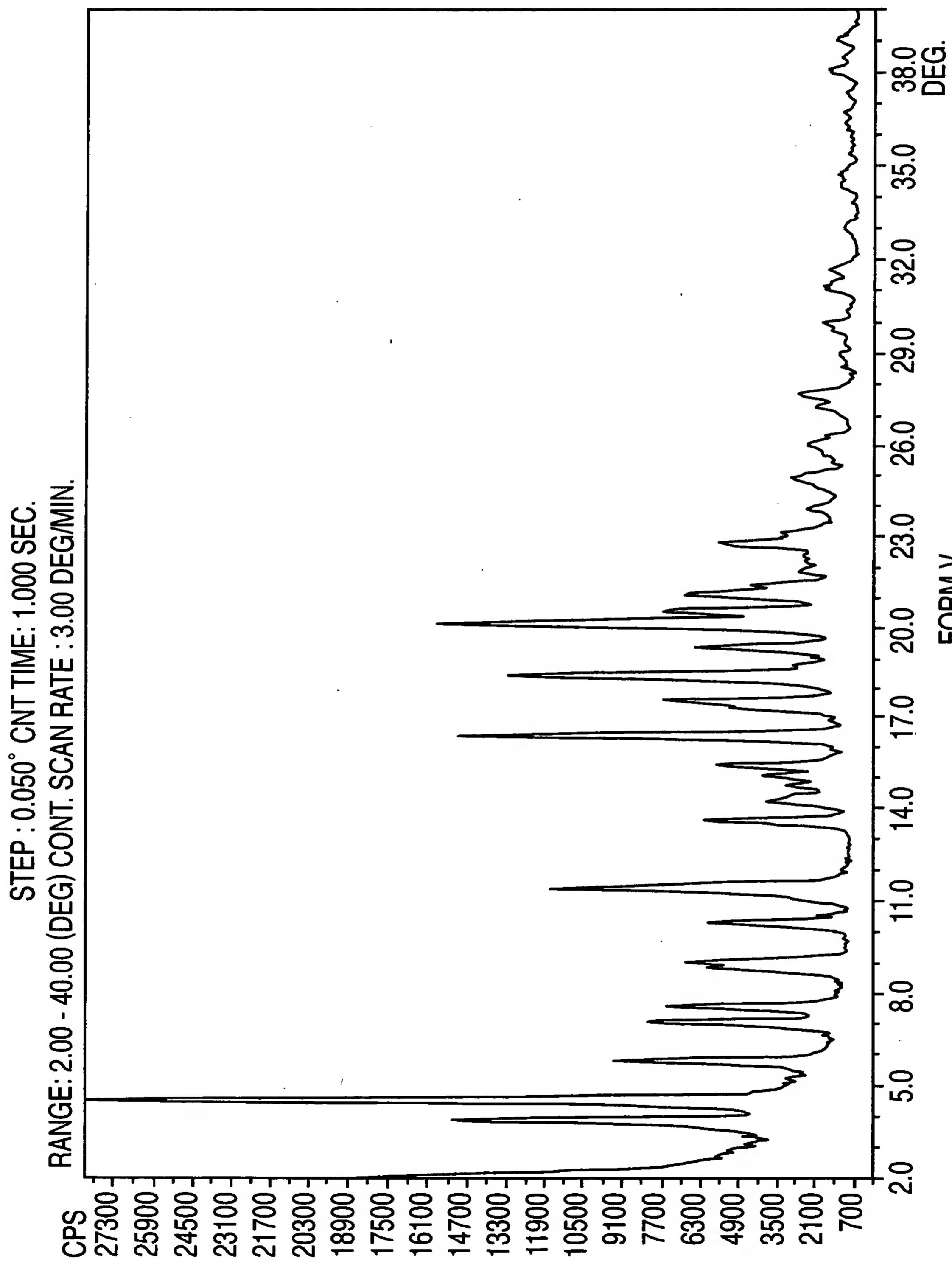


FIG. 17  
FORM U

18/64



FORM V  
FIG. 18

19/64

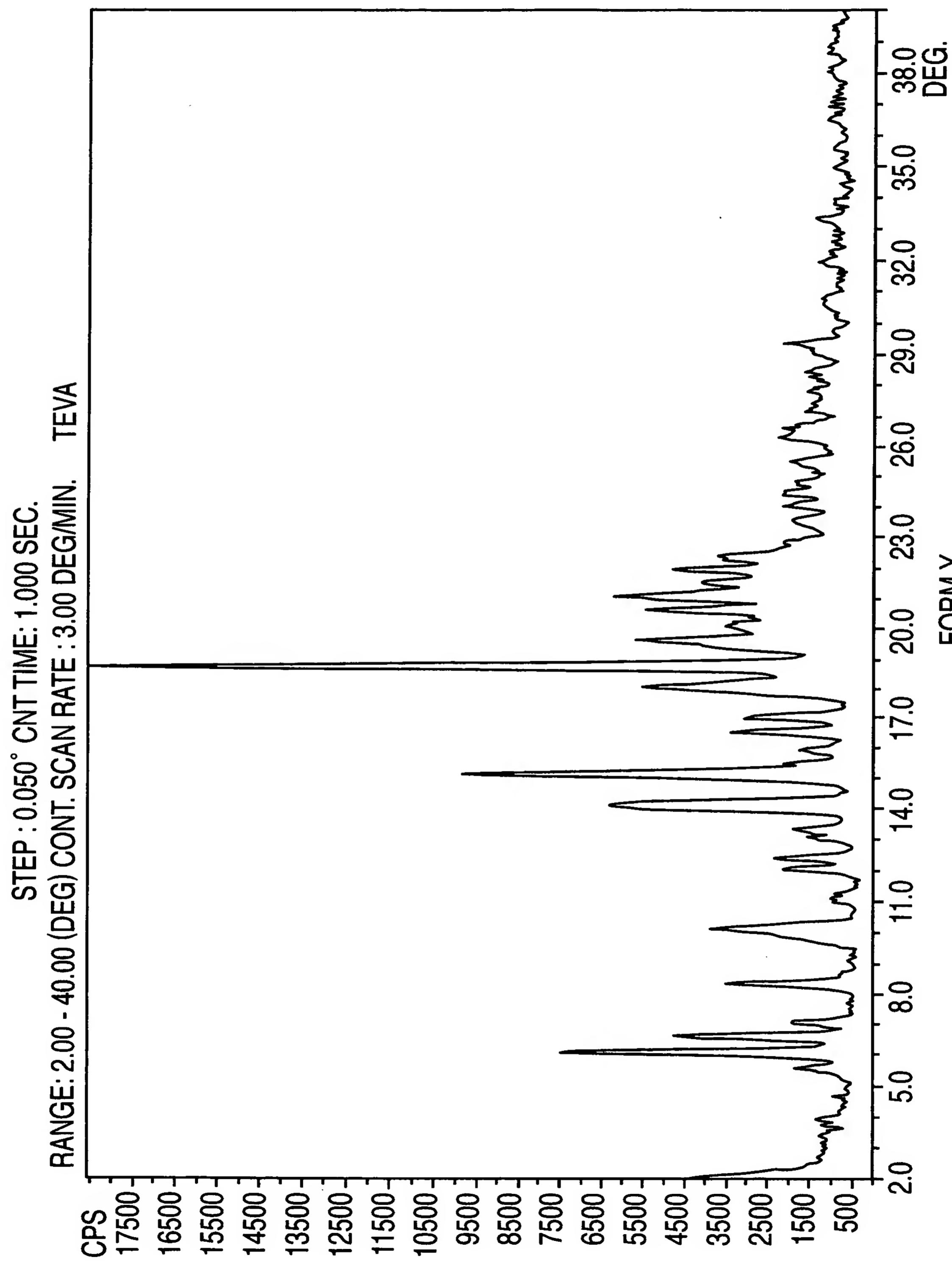
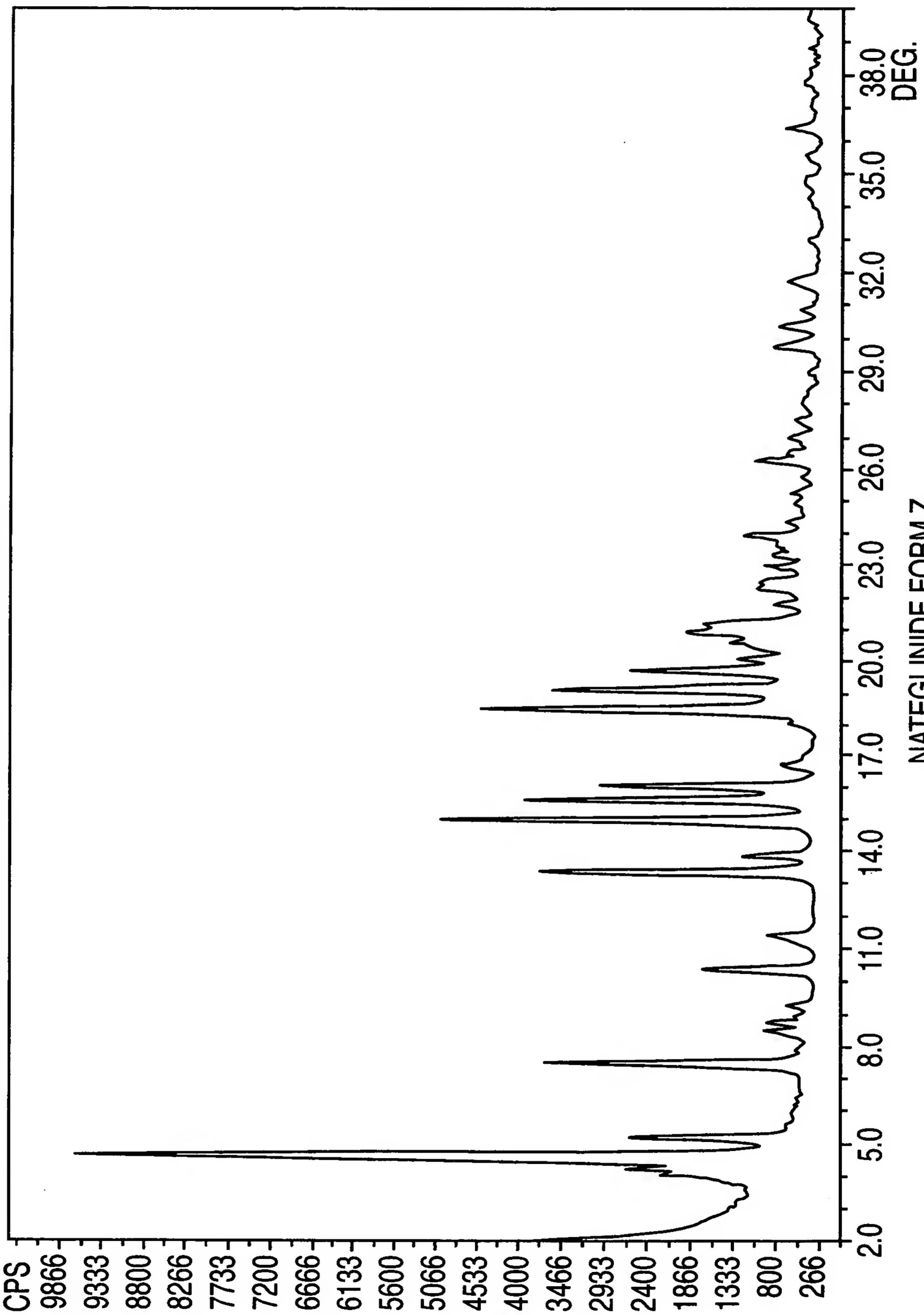


FIG. 19  
FORM Y

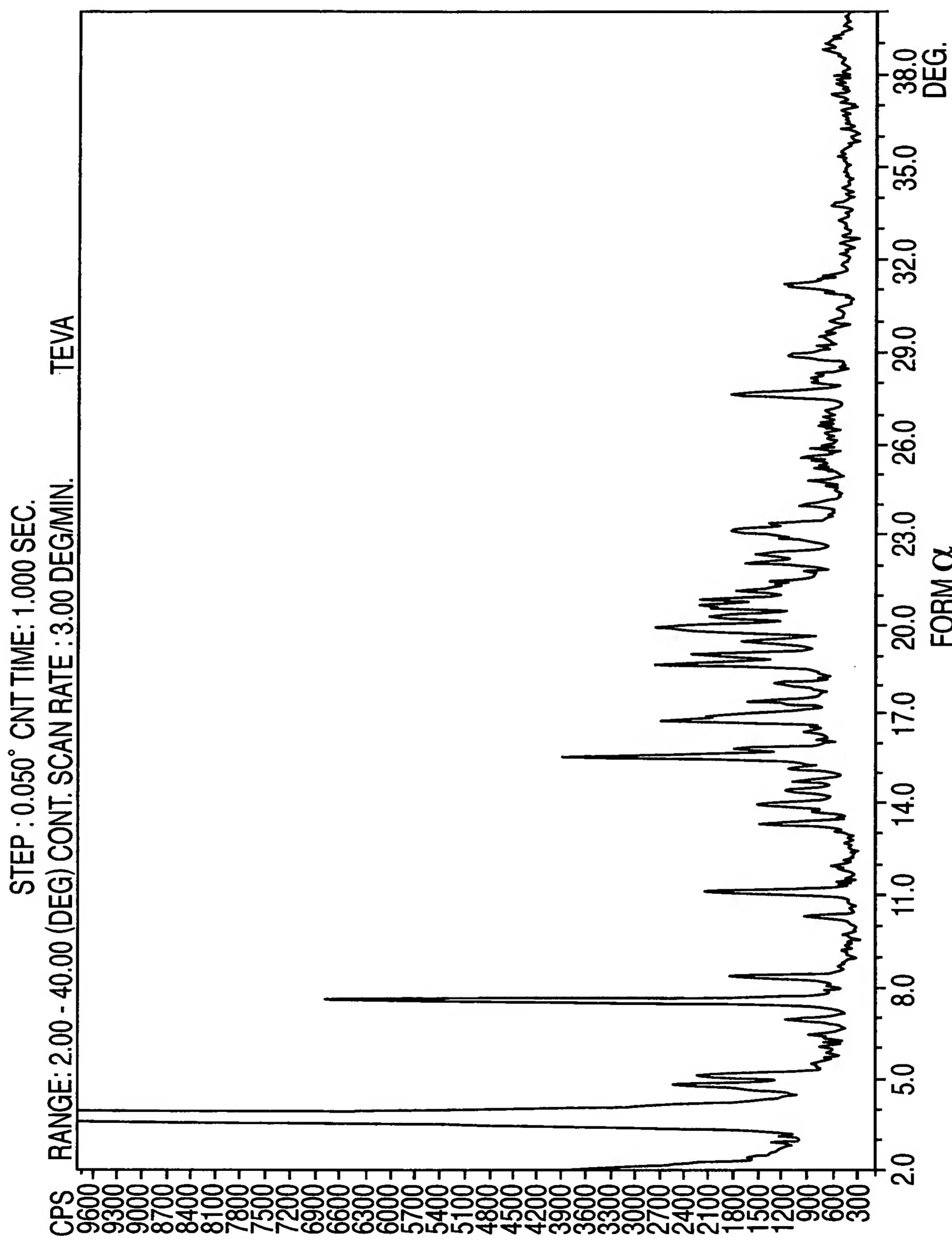
STEP : 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.

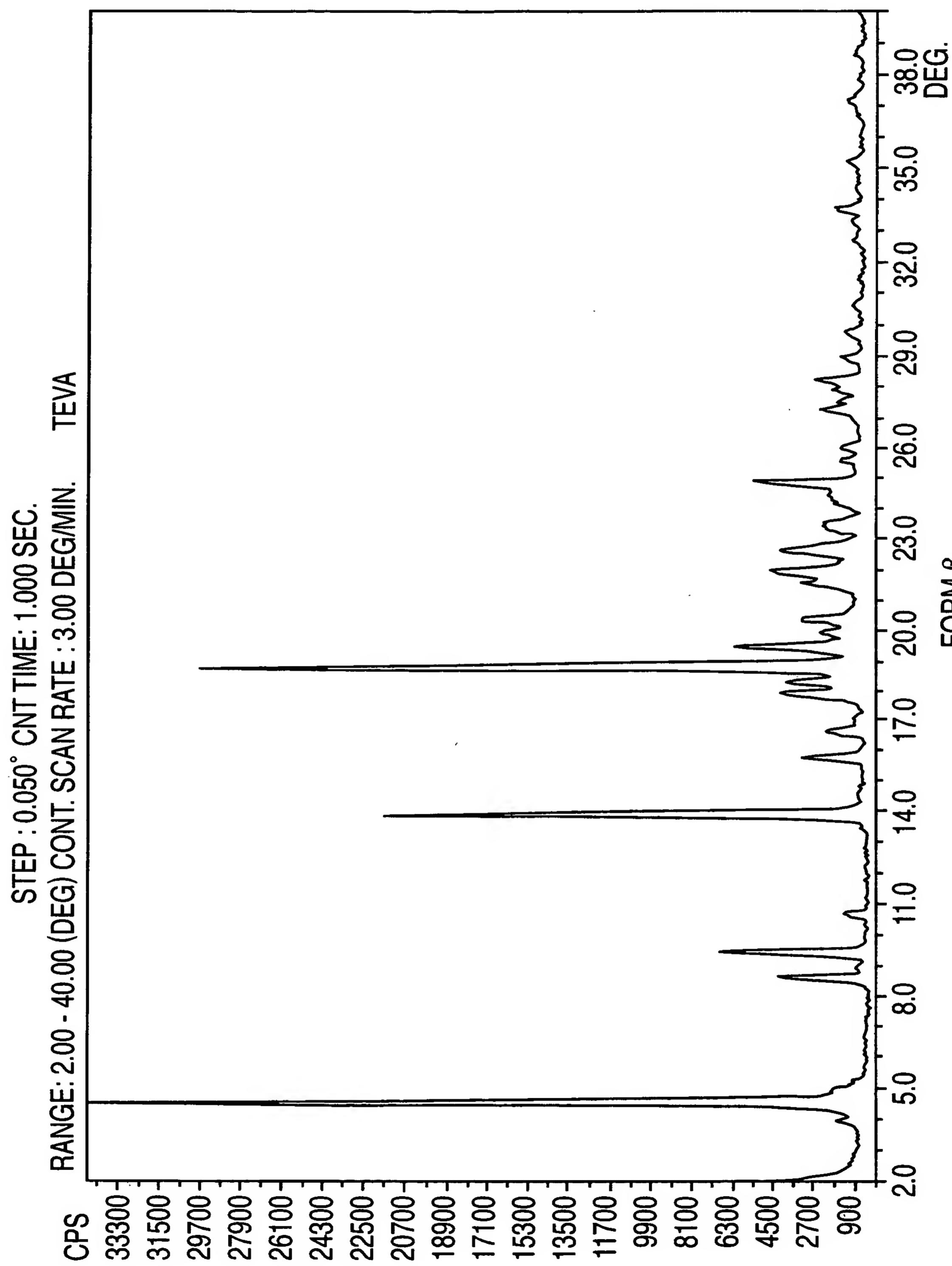


NATEGLINIDE FORM Z

FIG. 20

21/64



FIG. 22  
FORM  $\beta$

23/64

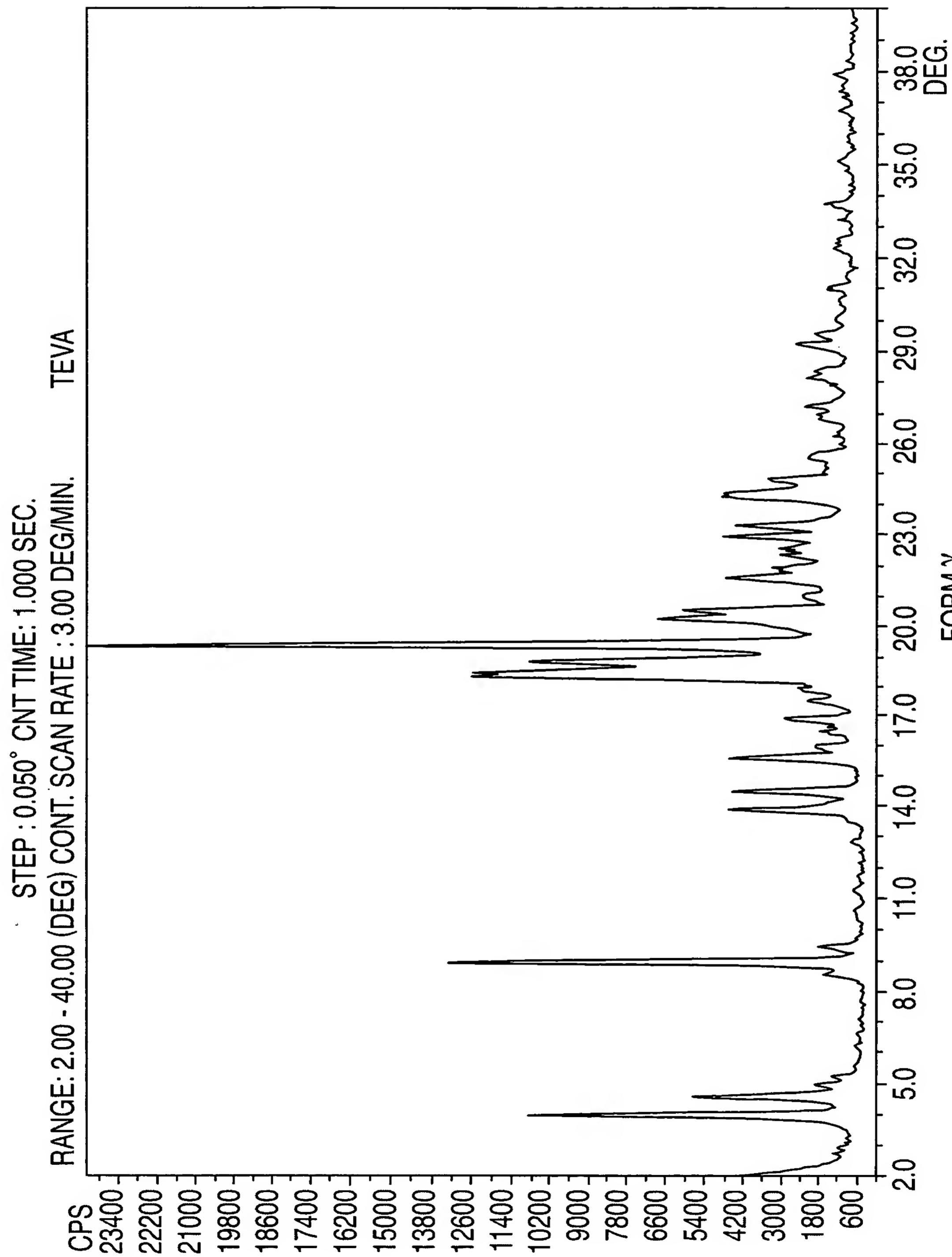


FIG. 23  
FORM  $\gamma$

24/64

STEP : 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN. TEVA

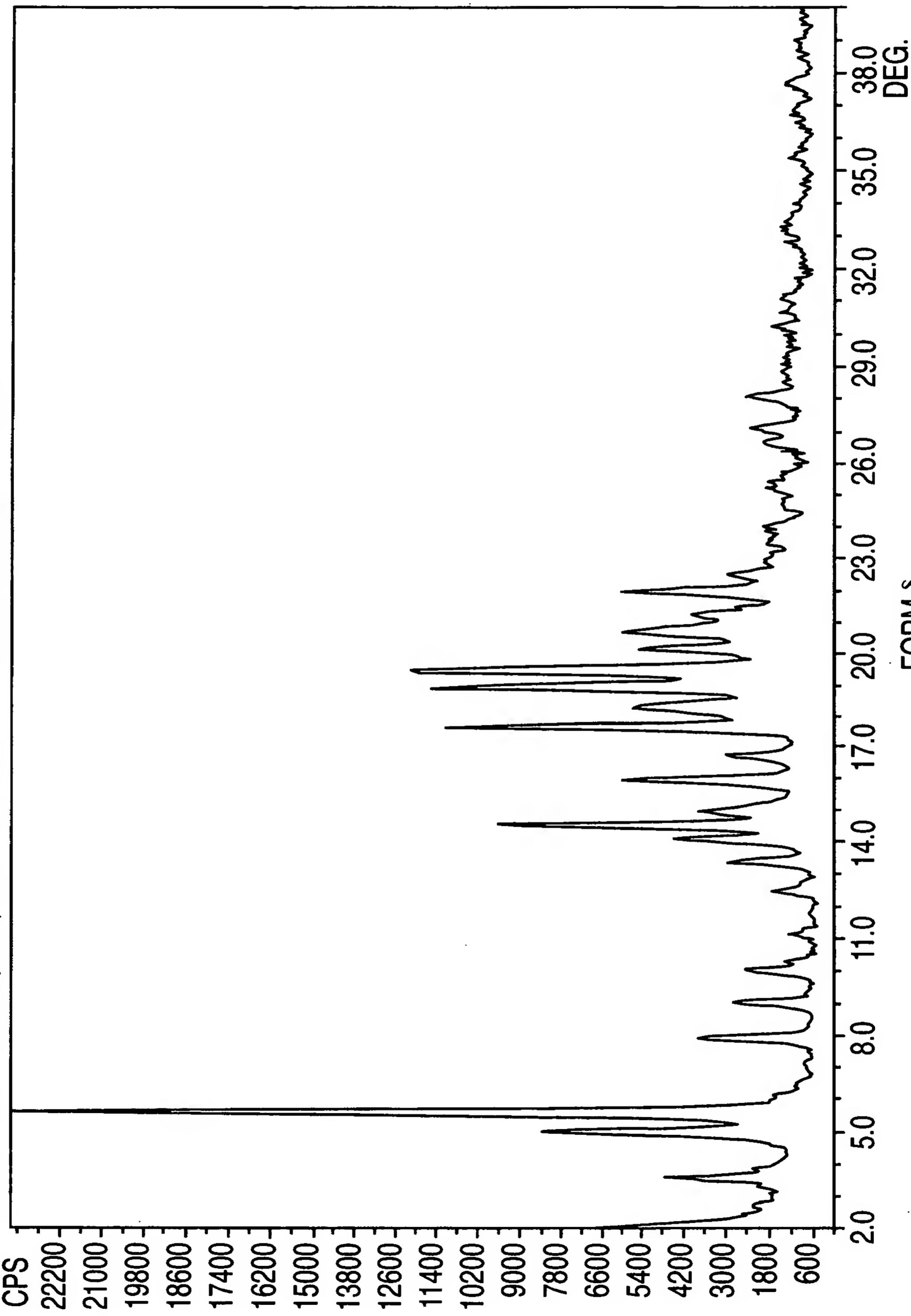
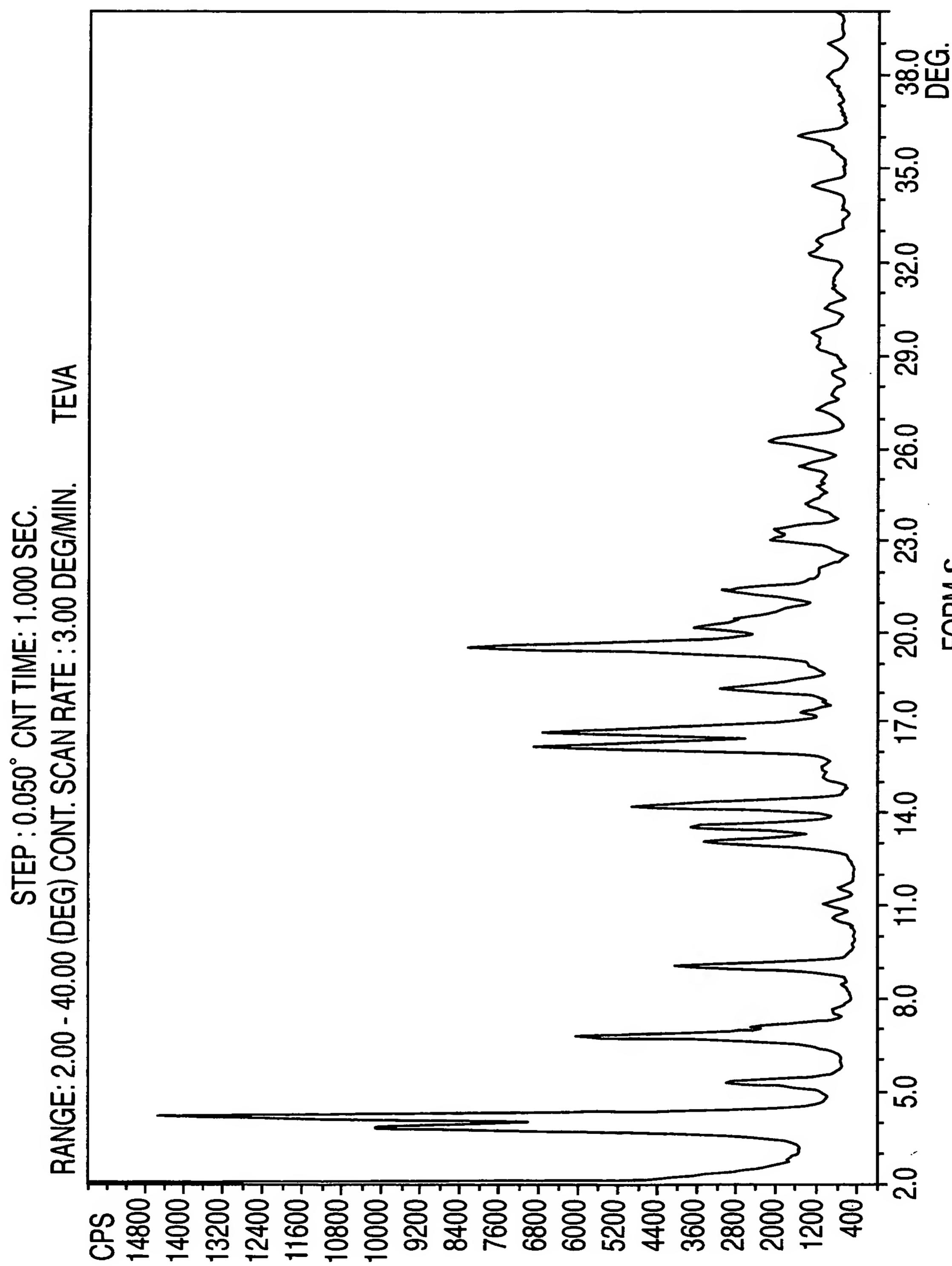
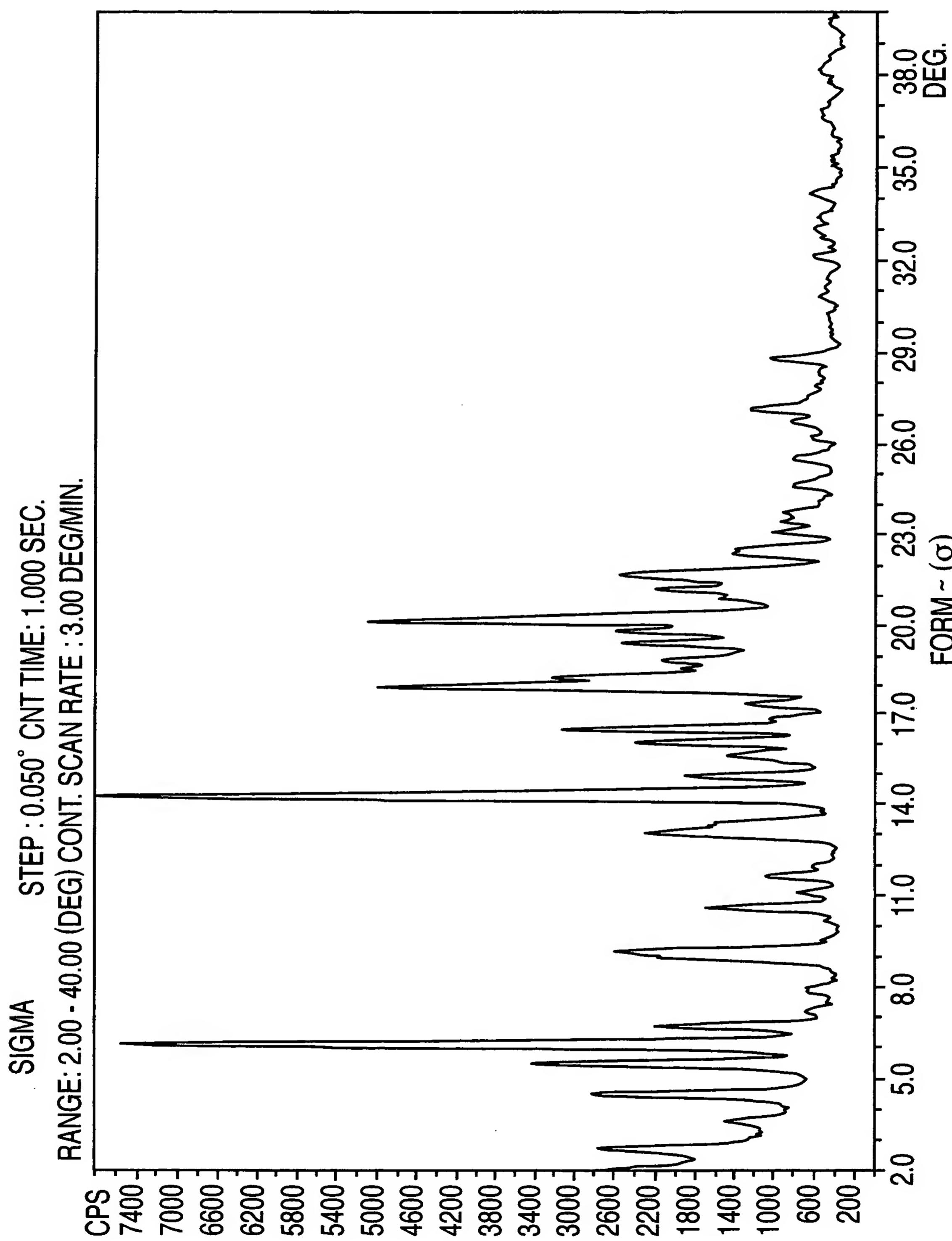


FIG. 24  
FORM δ

25/64



26/64



# FORM ~ (σ)

# FIG. 26

27/64

THETA STEP: 0.050° CNT TIME: 1.000 SEC.  
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE: 3.00 DEG/MIN.

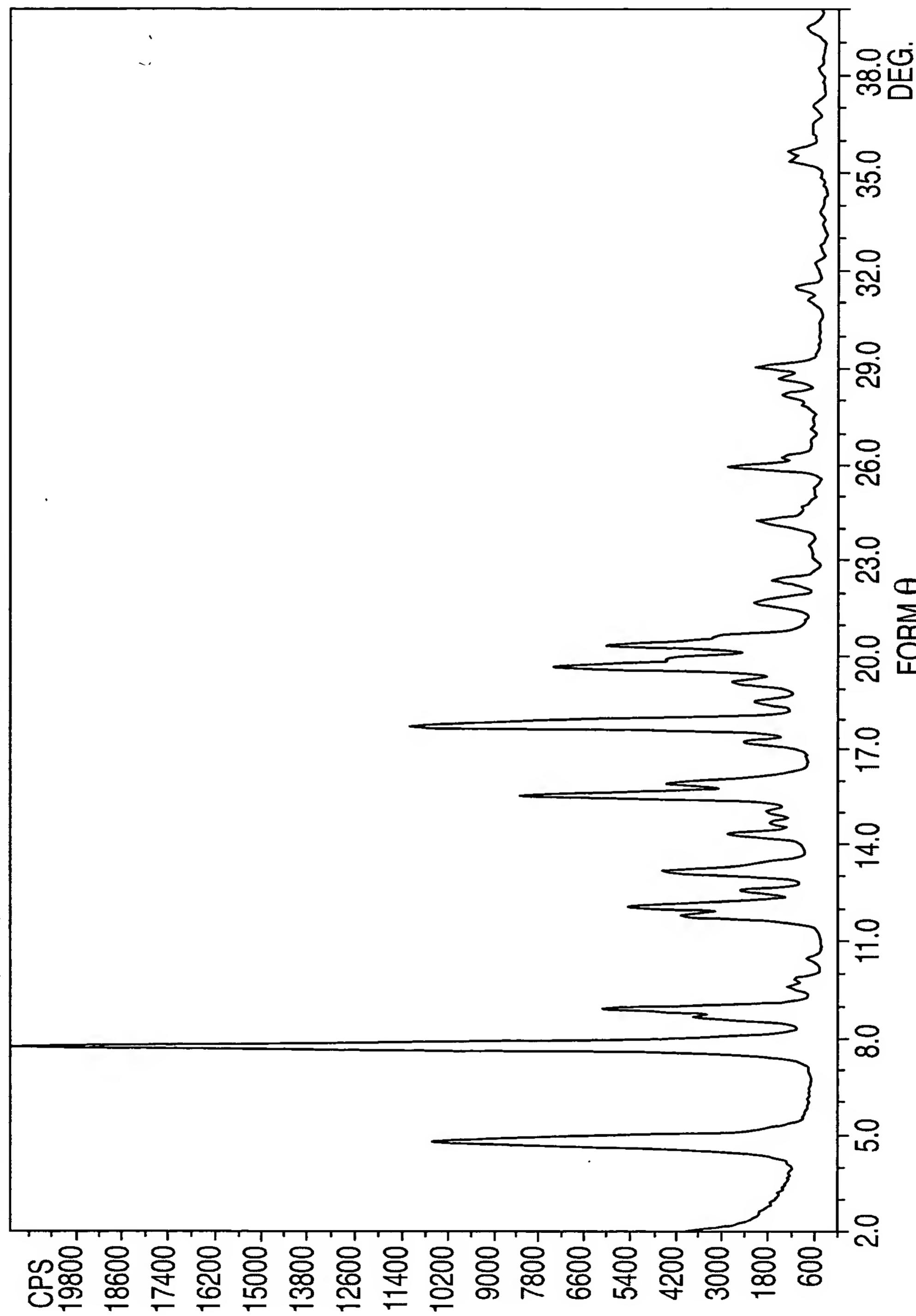
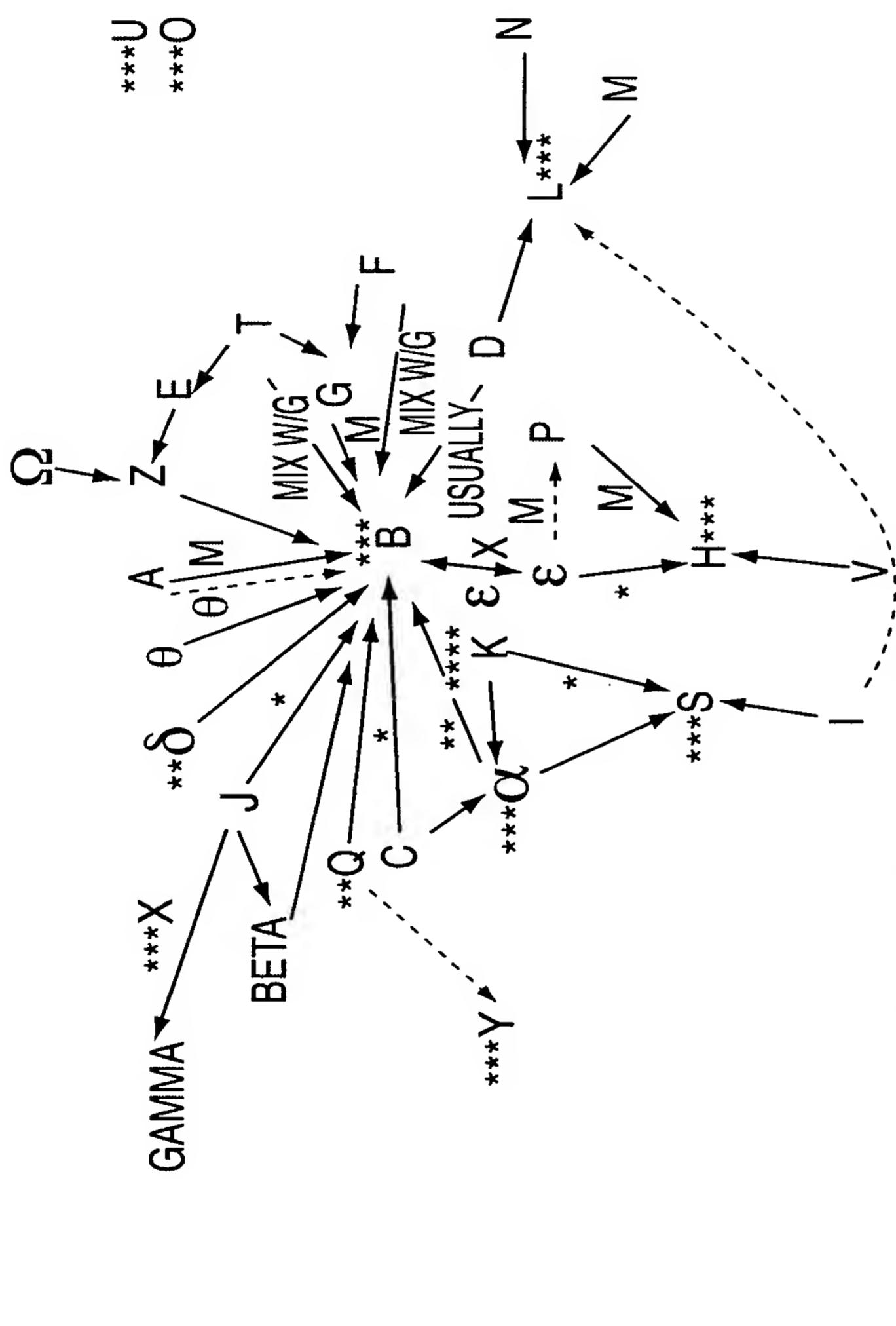
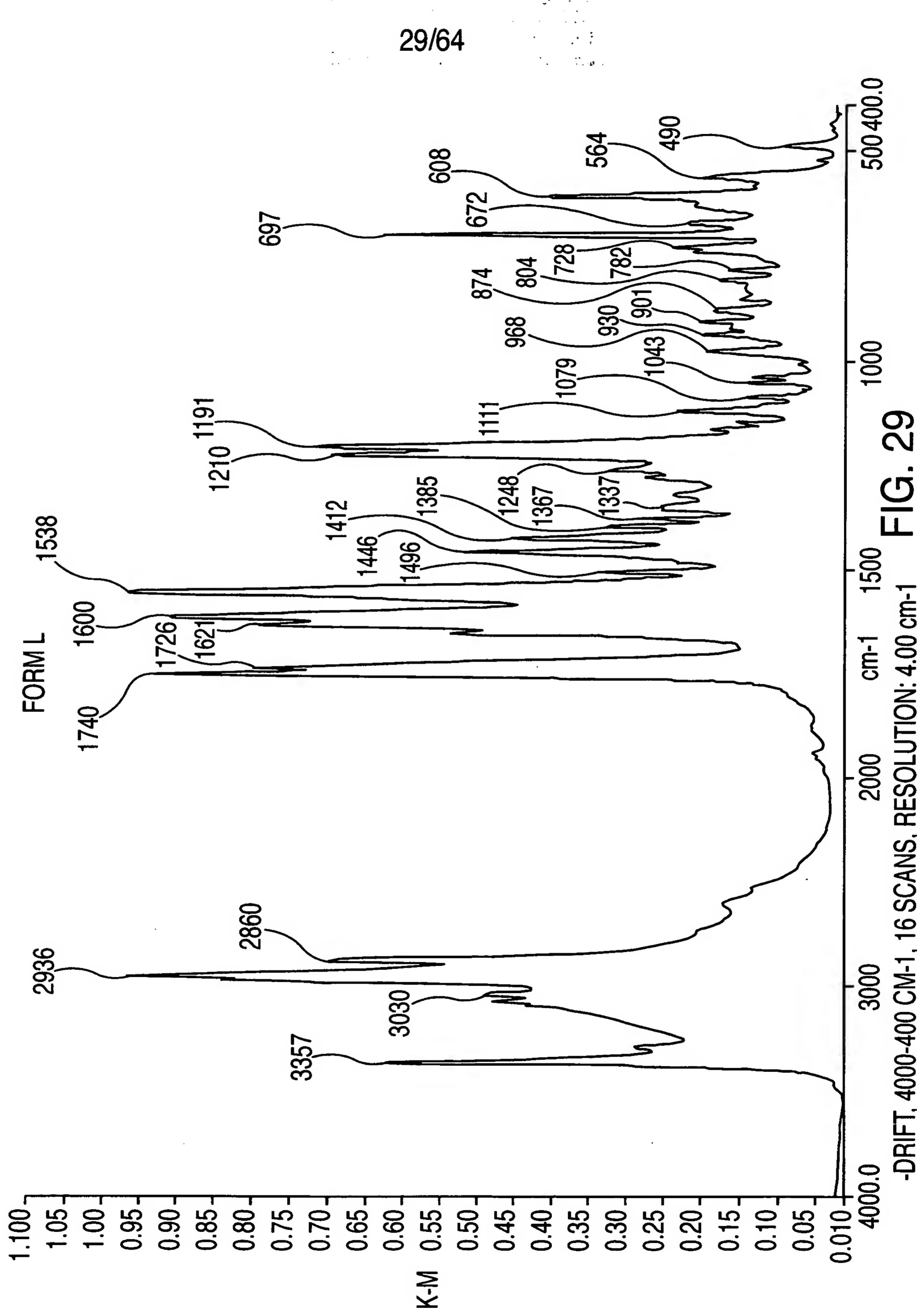


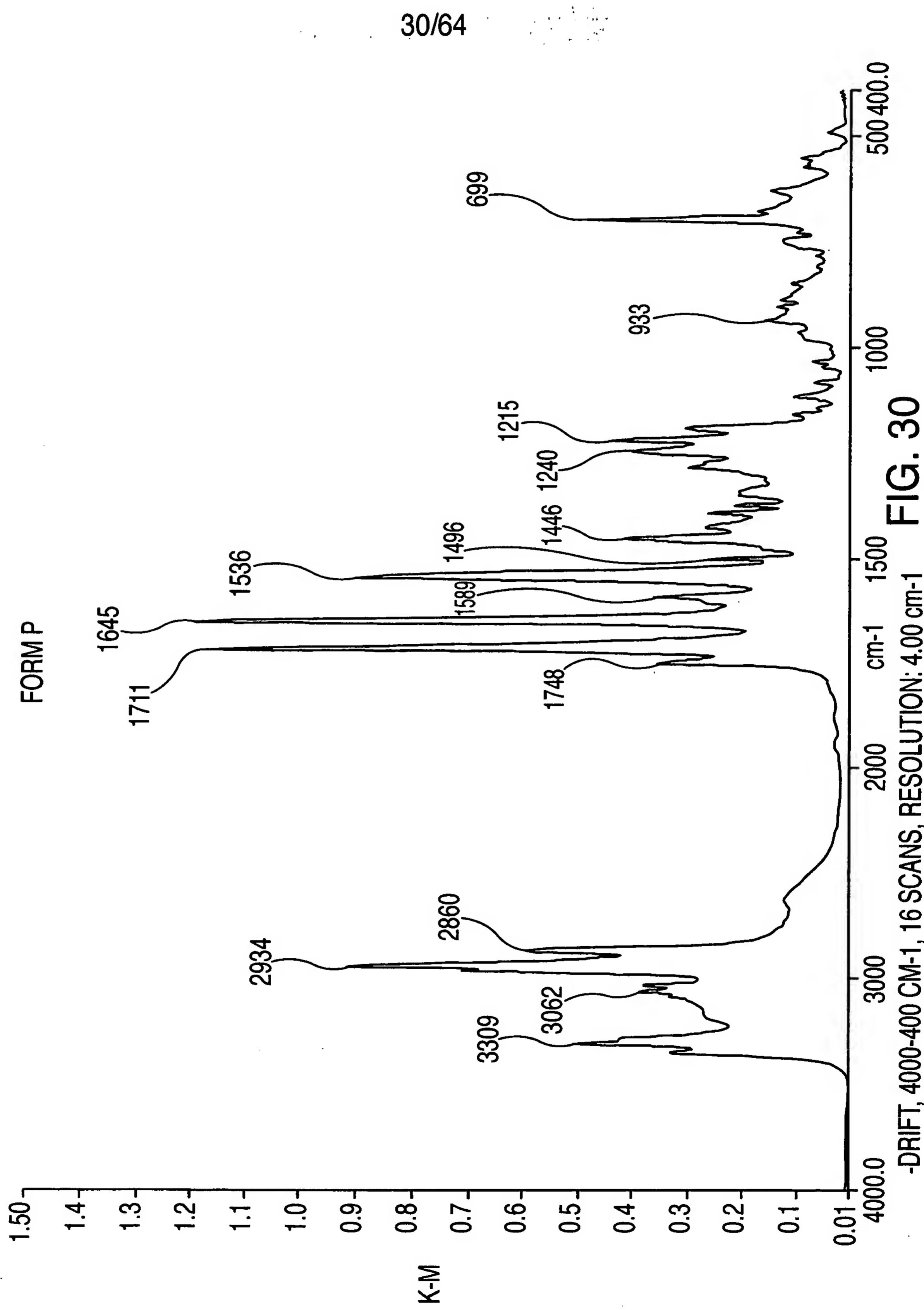
FIG. 27



THERMAL STABILITY CHART

FIG. 28





-DRIIFT, 4000-400 CM-1, 16 SCANS, RESOLUTION: 4.00 cm-1 FIG. 30

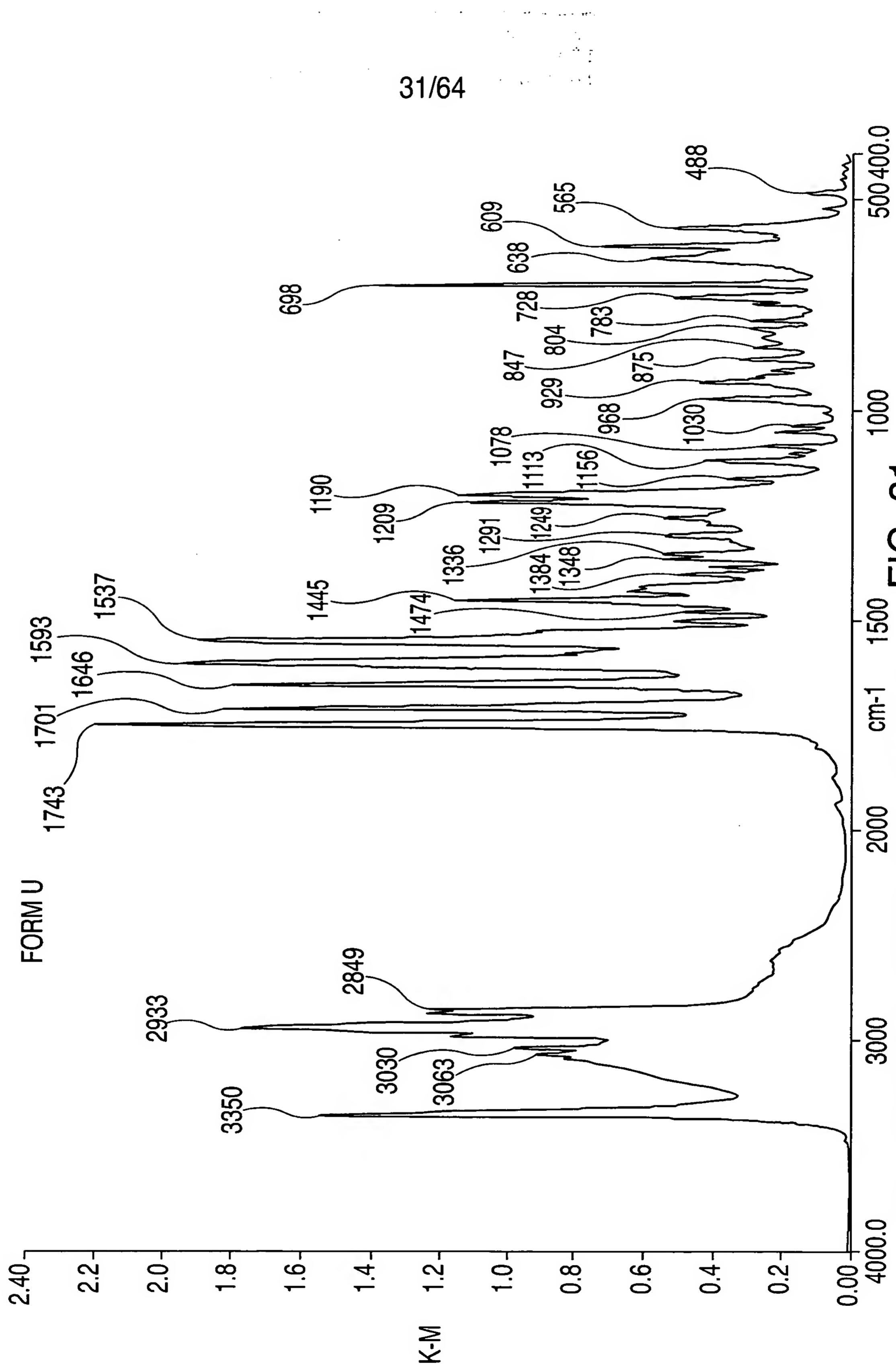
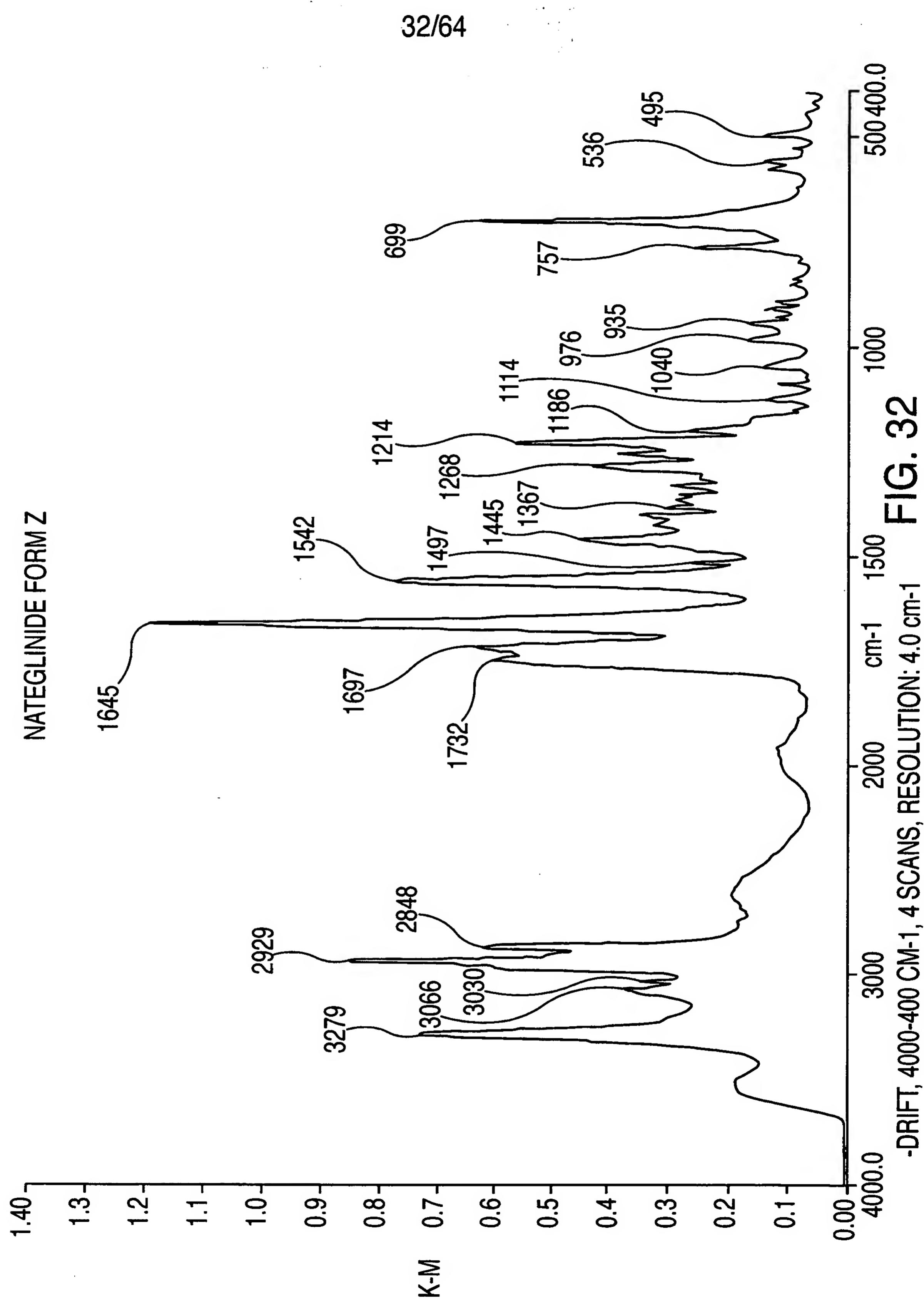
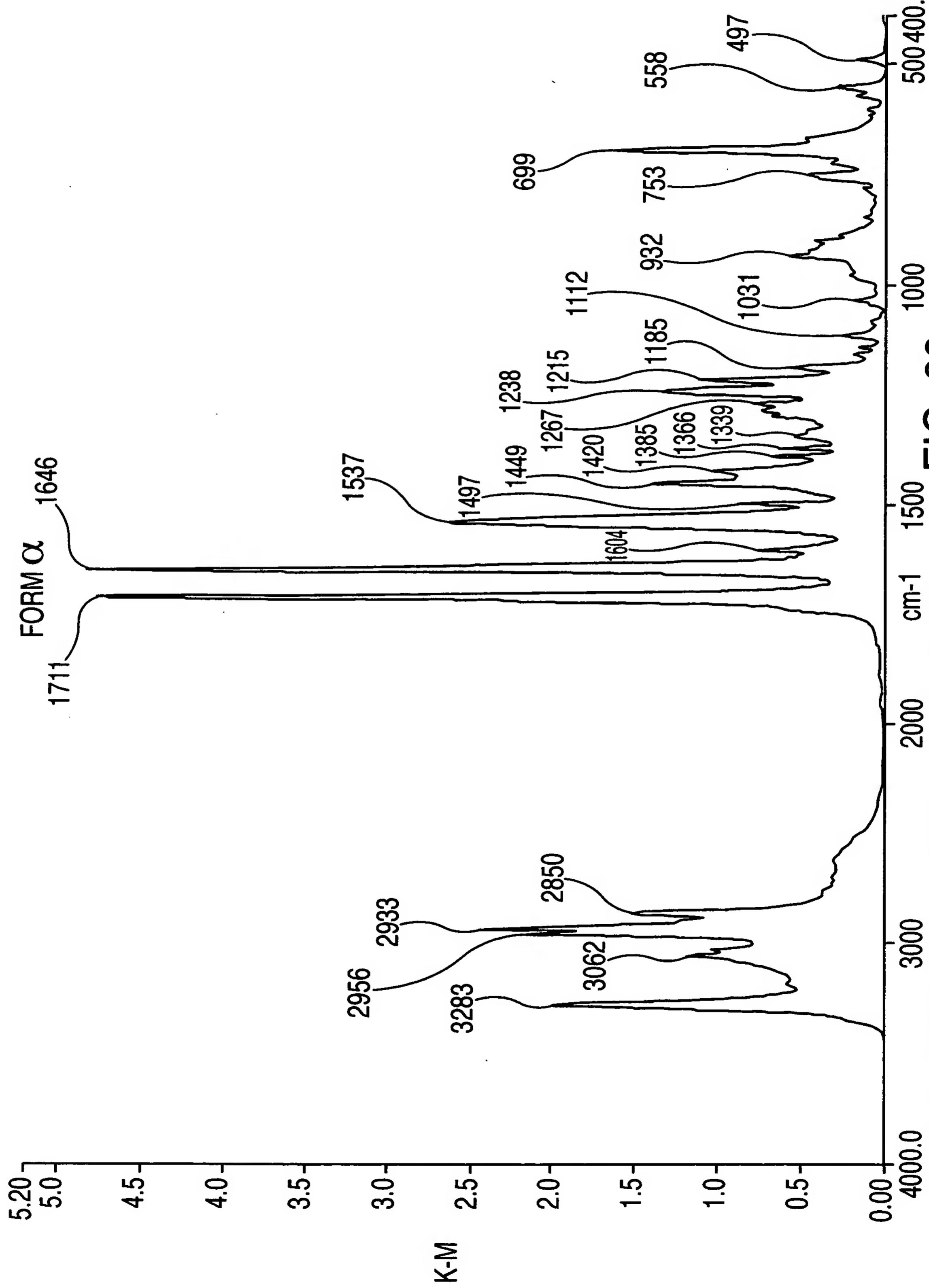
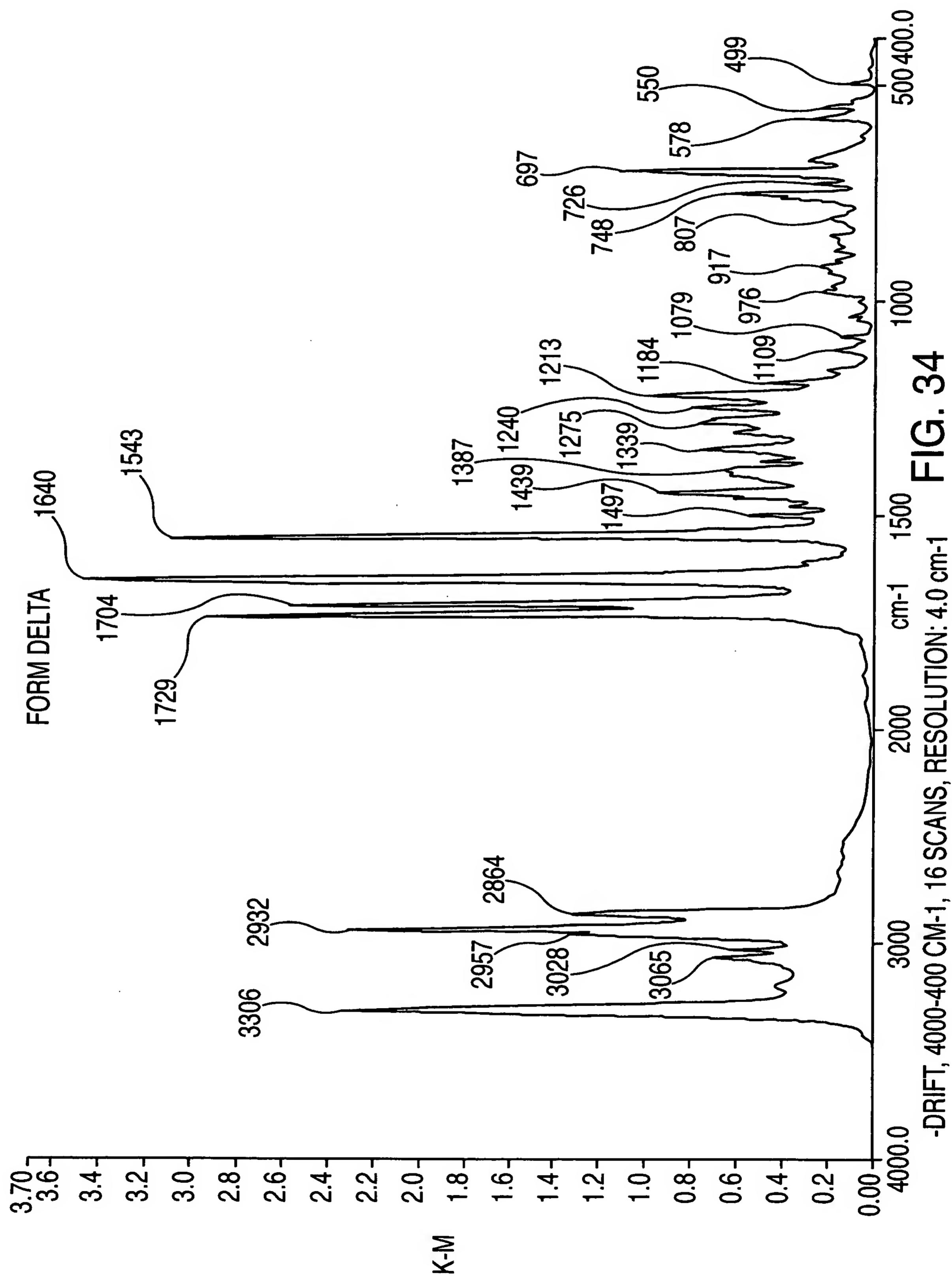


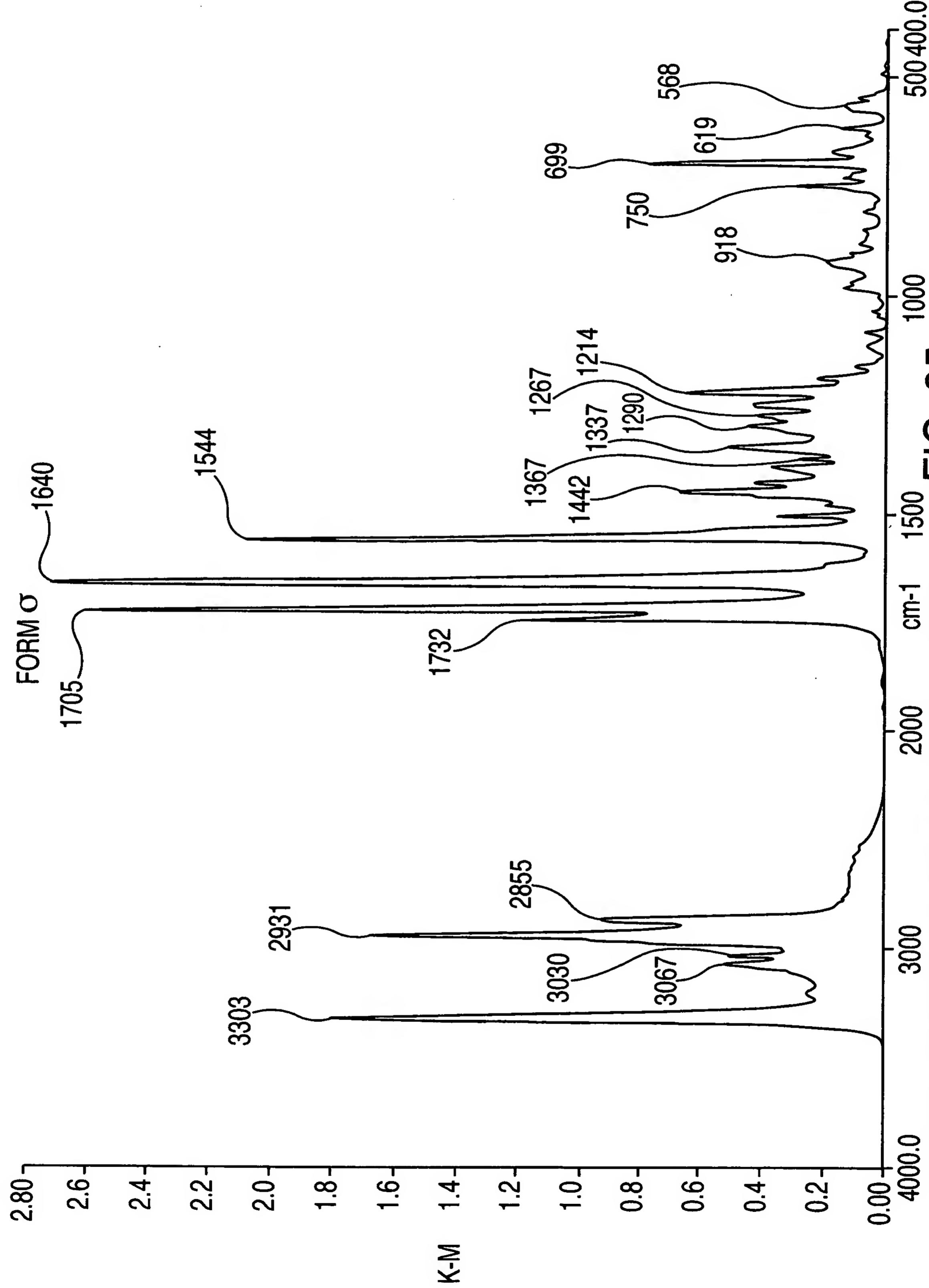
FIG. 31  
-DRIFT, 4000-400 CM<sup>-1</sup>, 16 SCANS, RESOLUTION: 4.0 cm<sup>-1</sup>

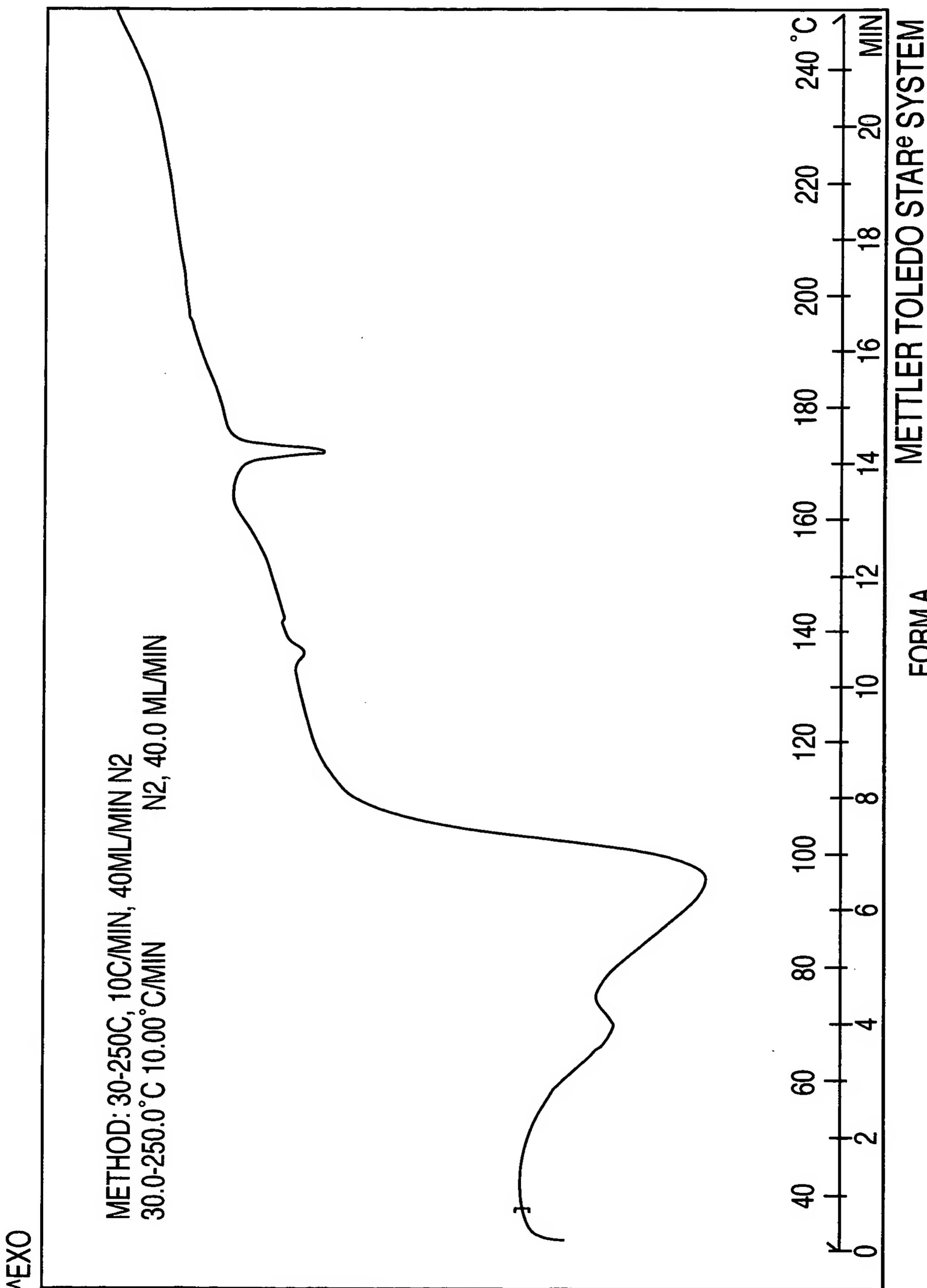


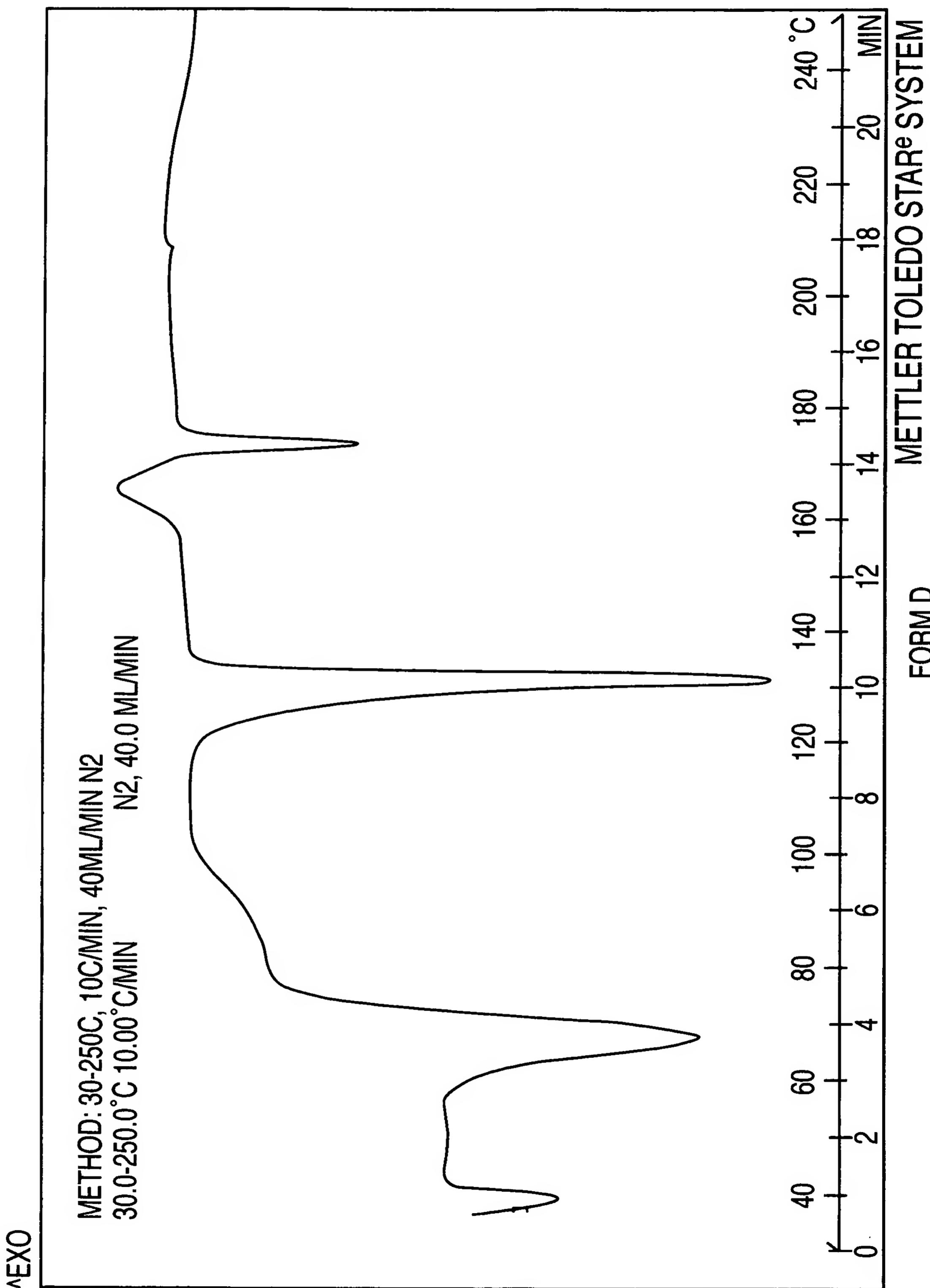


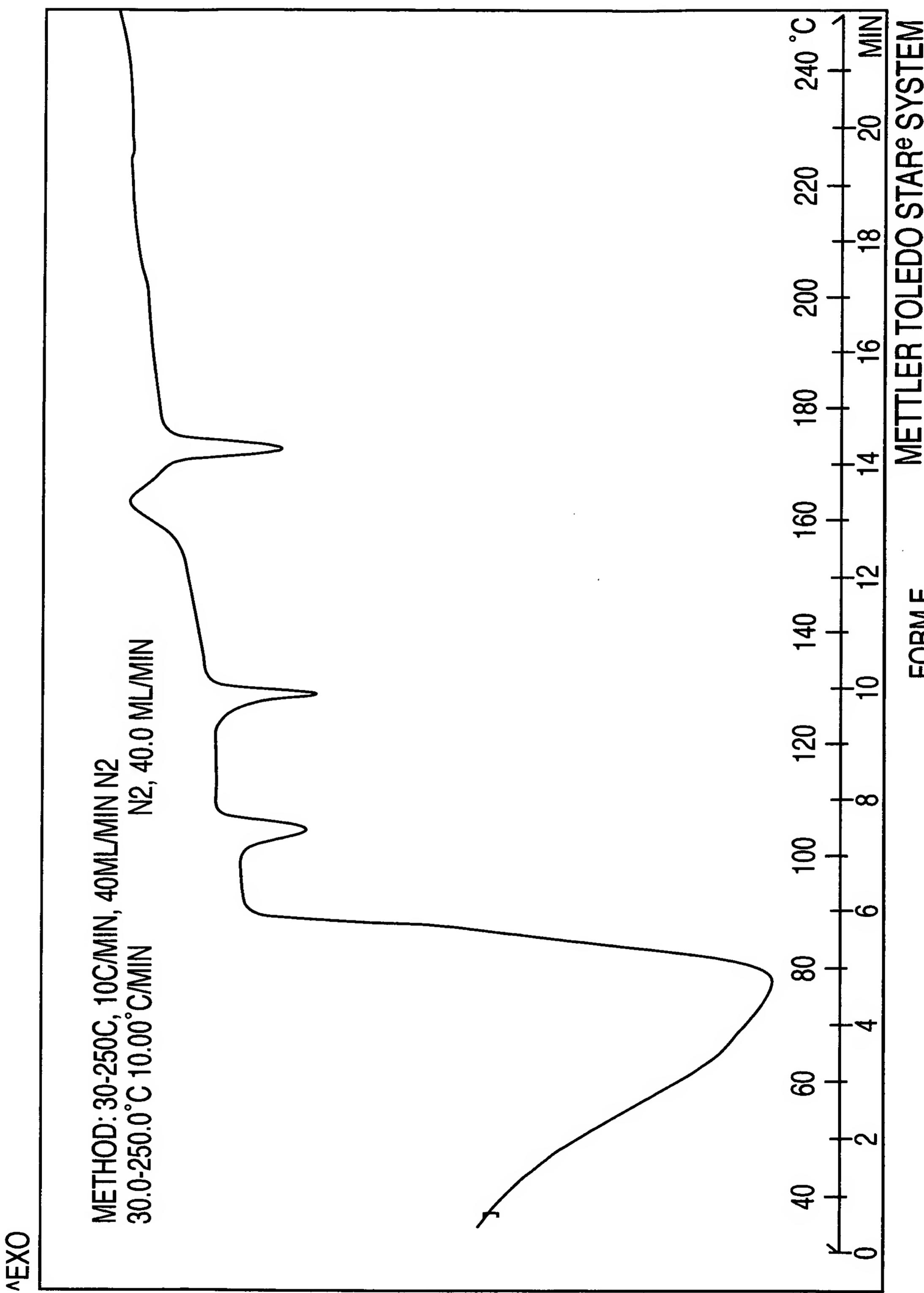
34/64











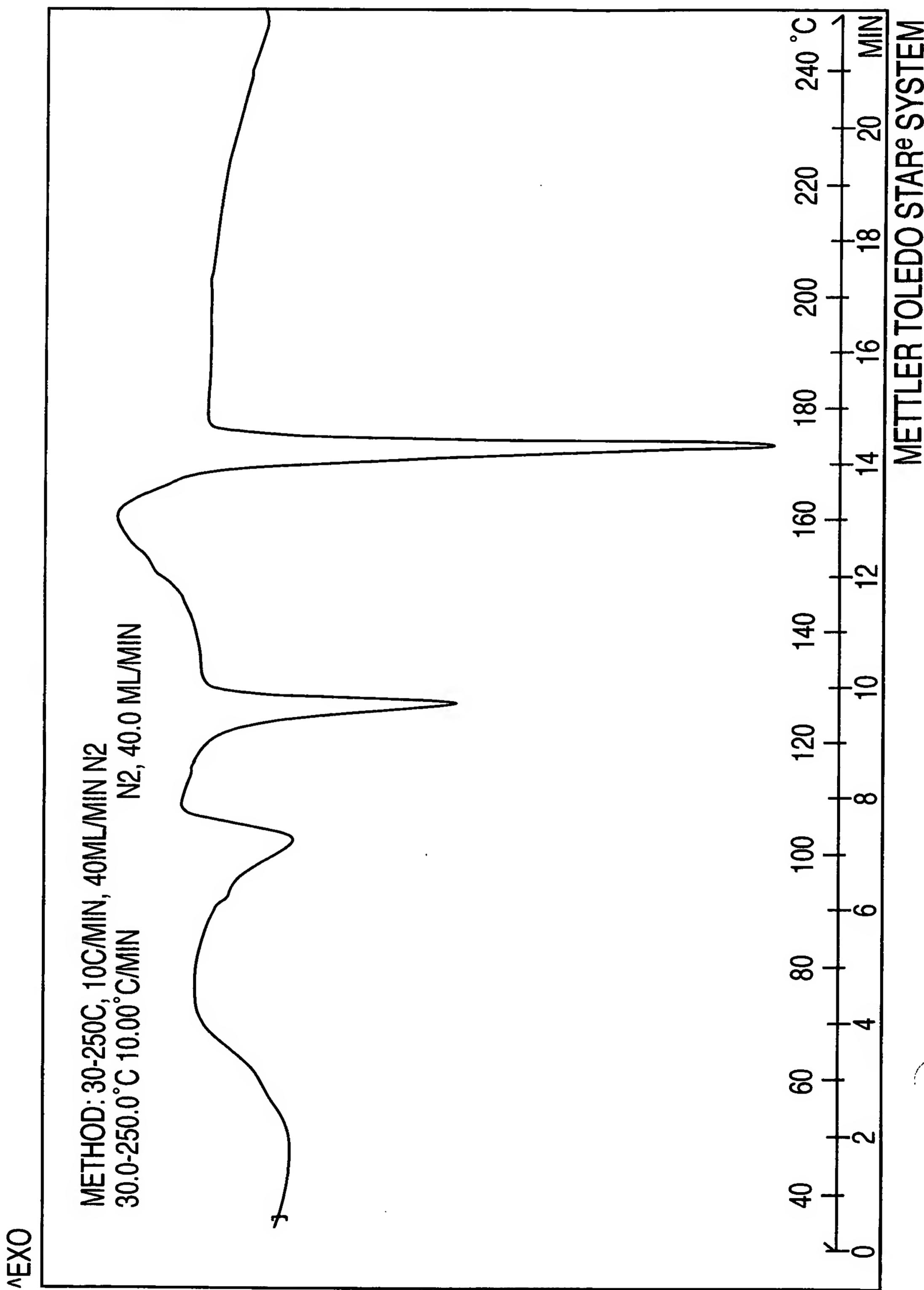


FIG. 39

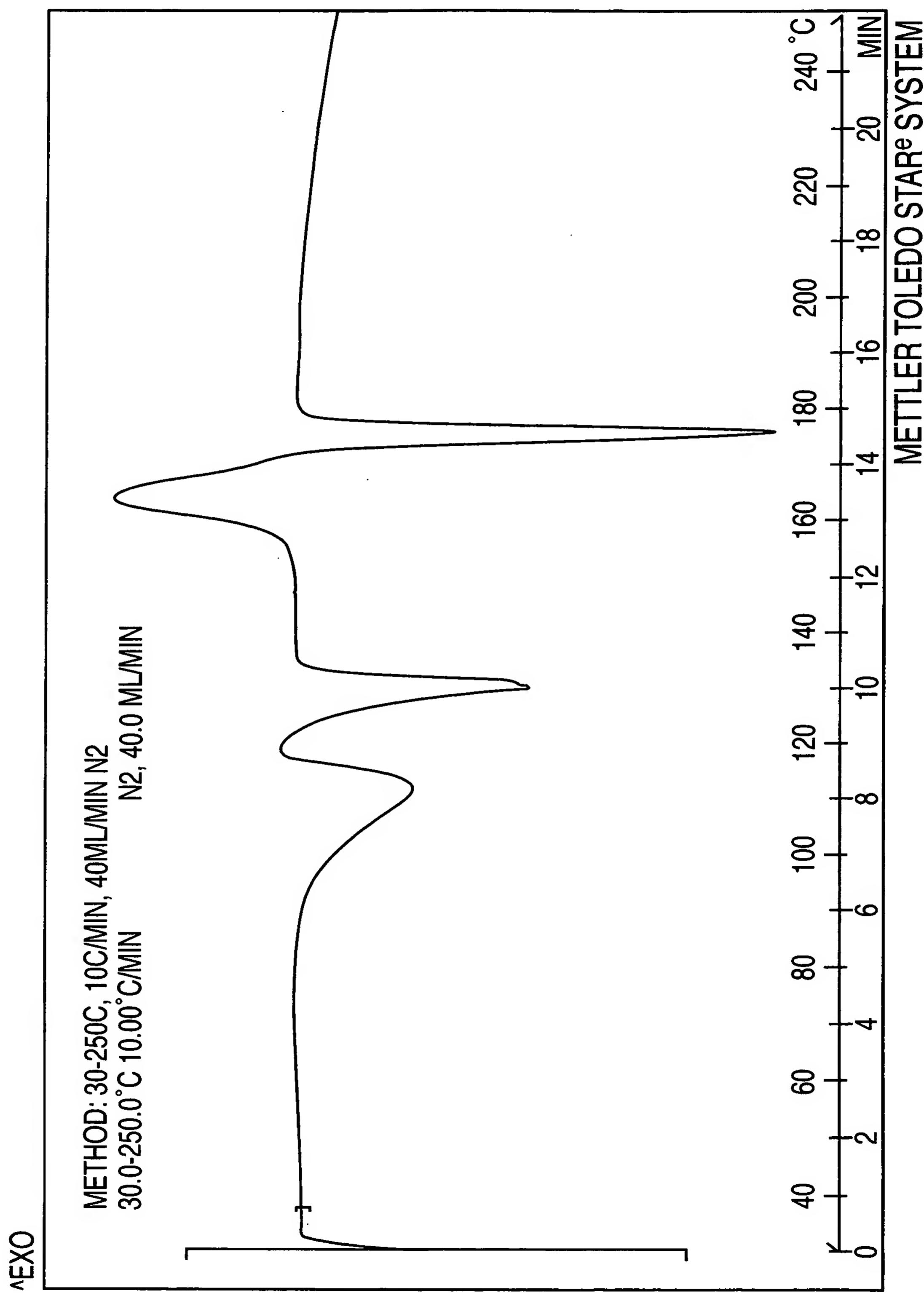
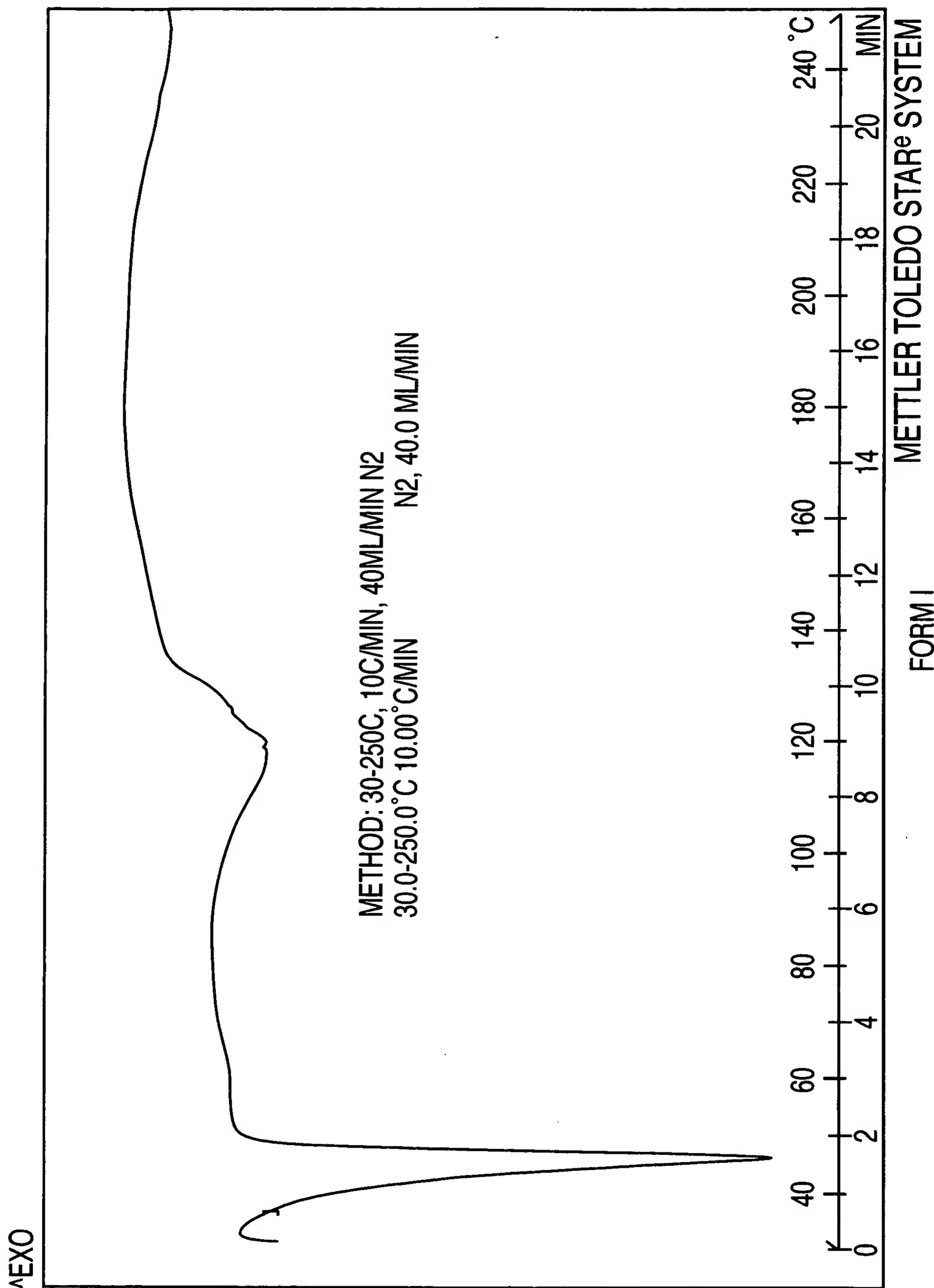
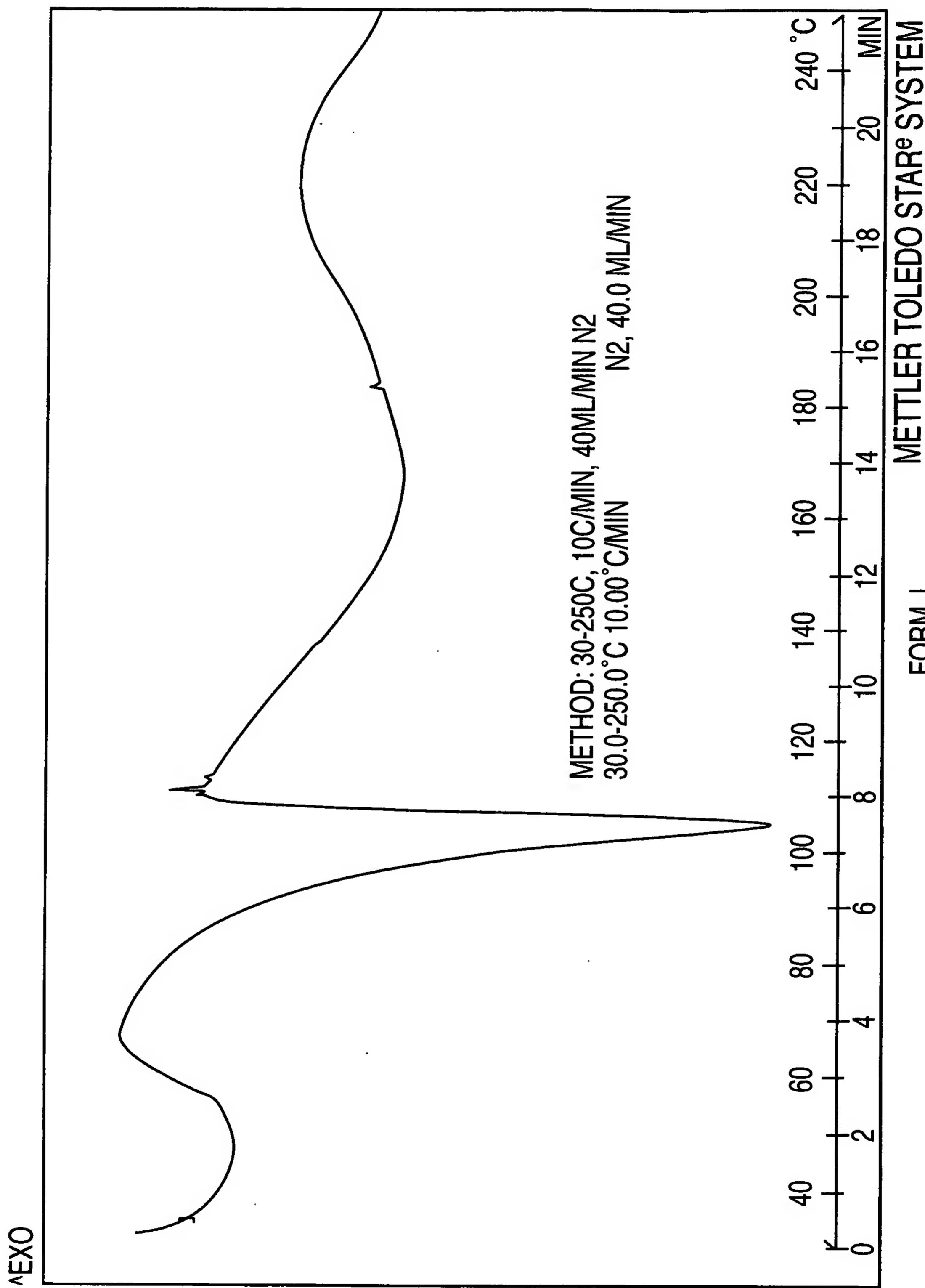


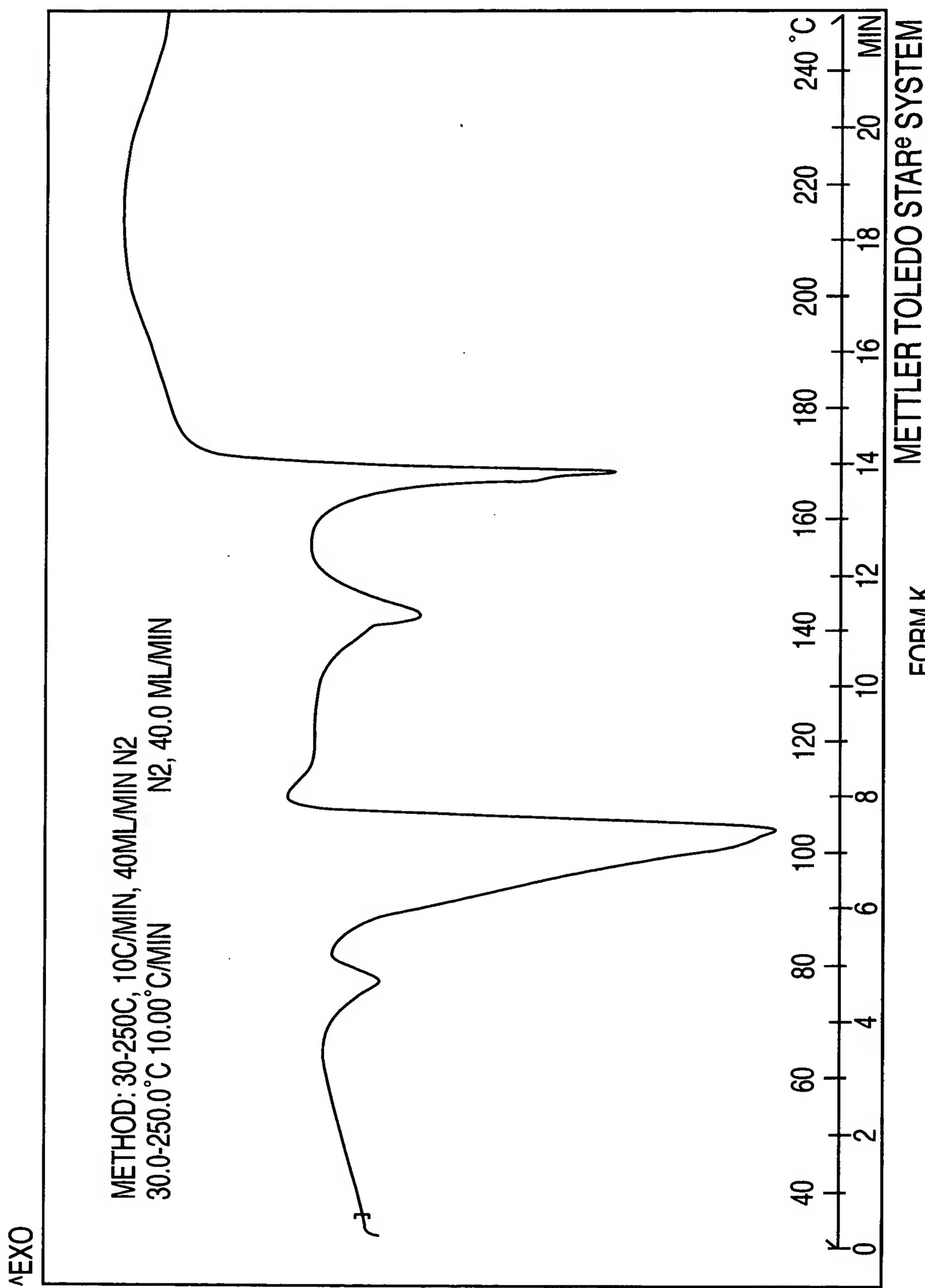
FIG. 40

41/64

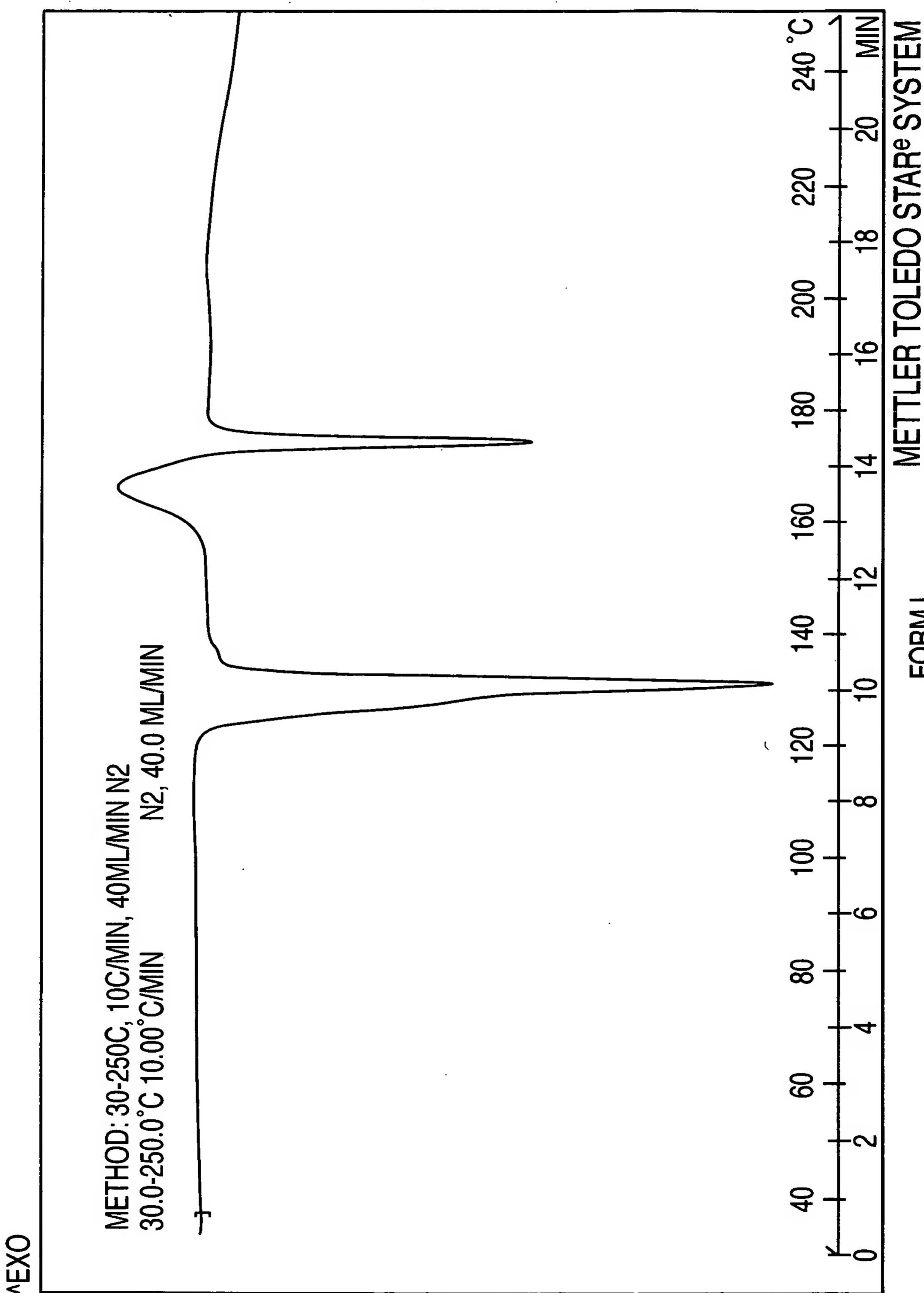


42/64

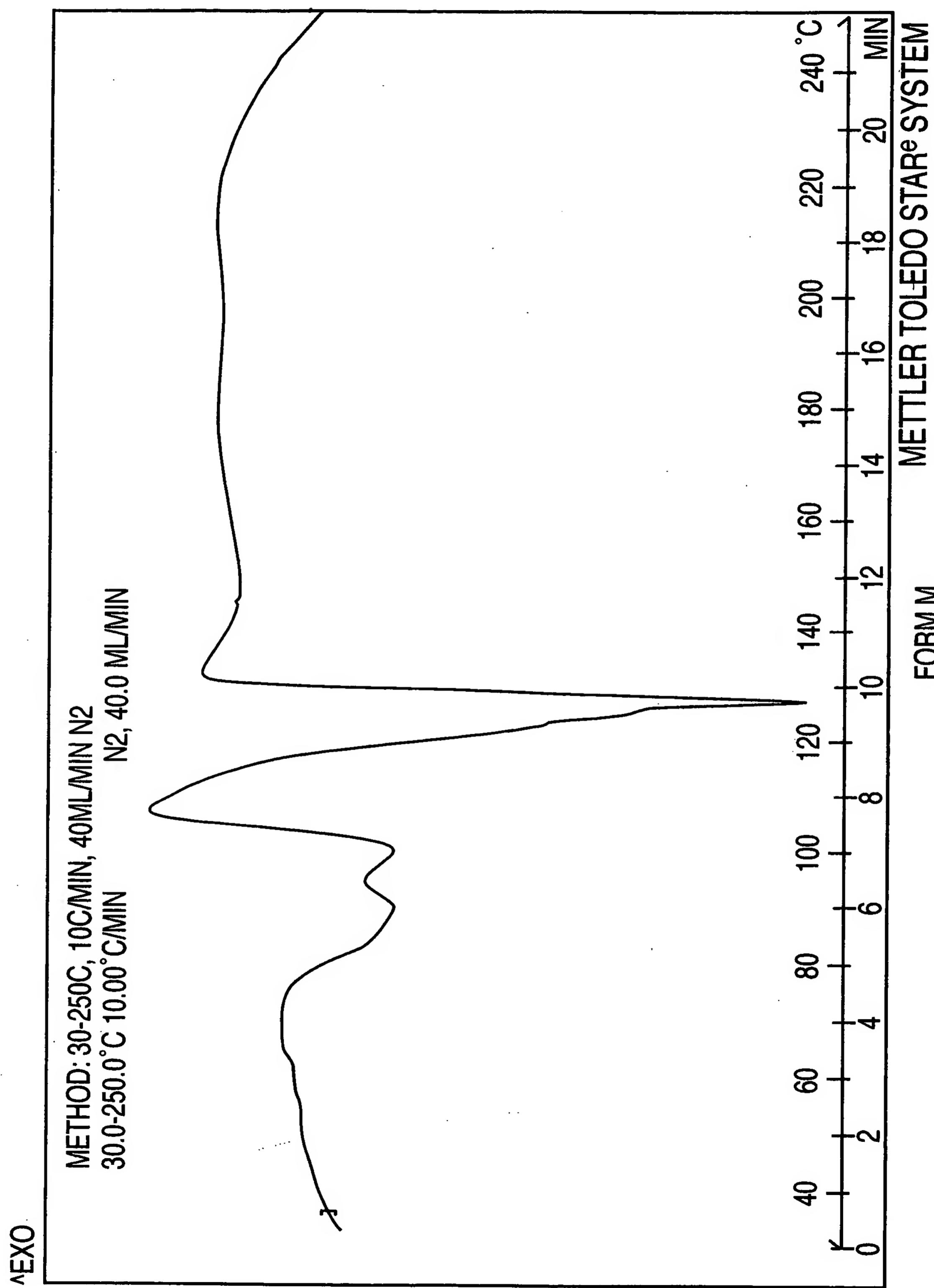


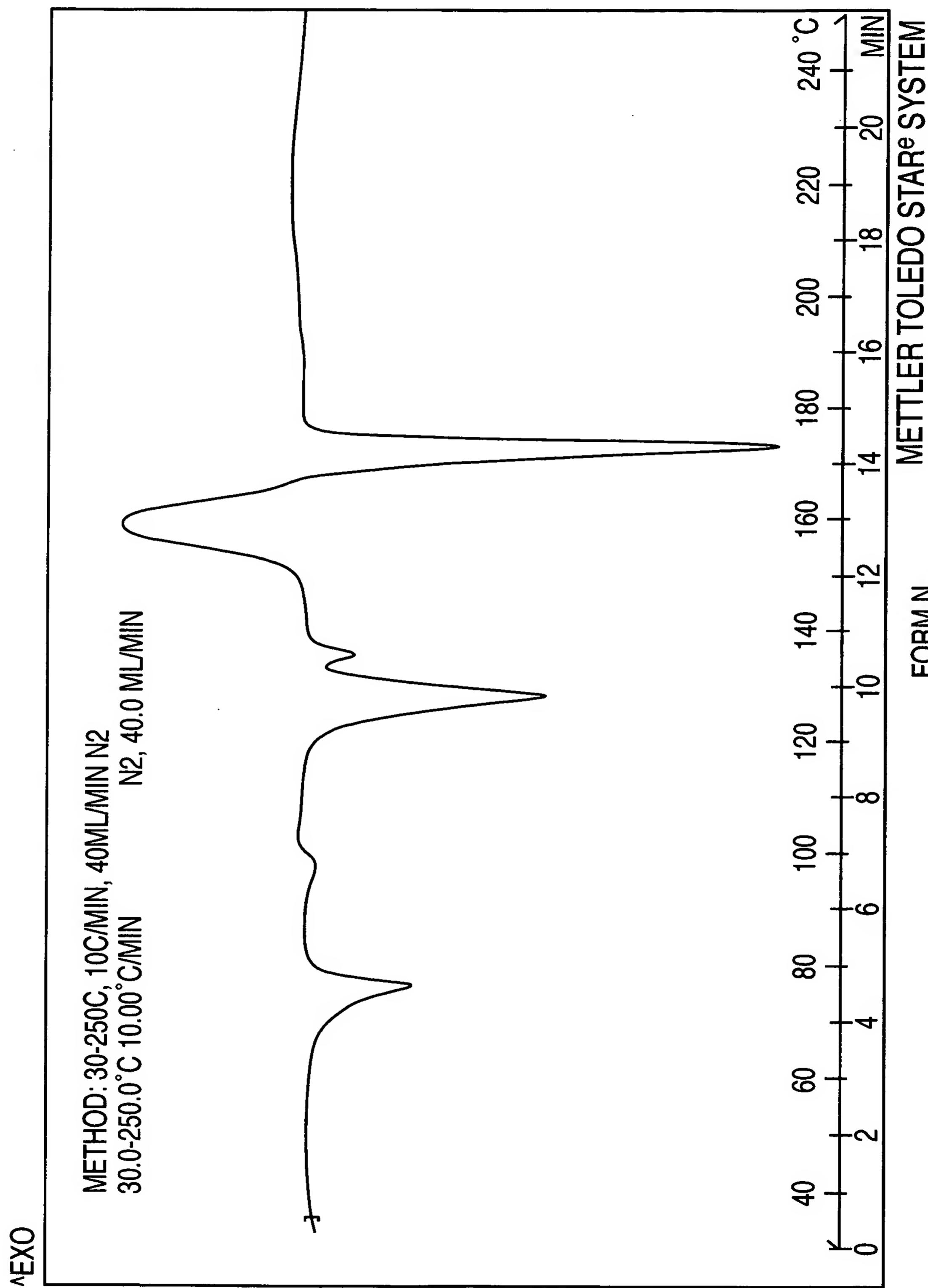


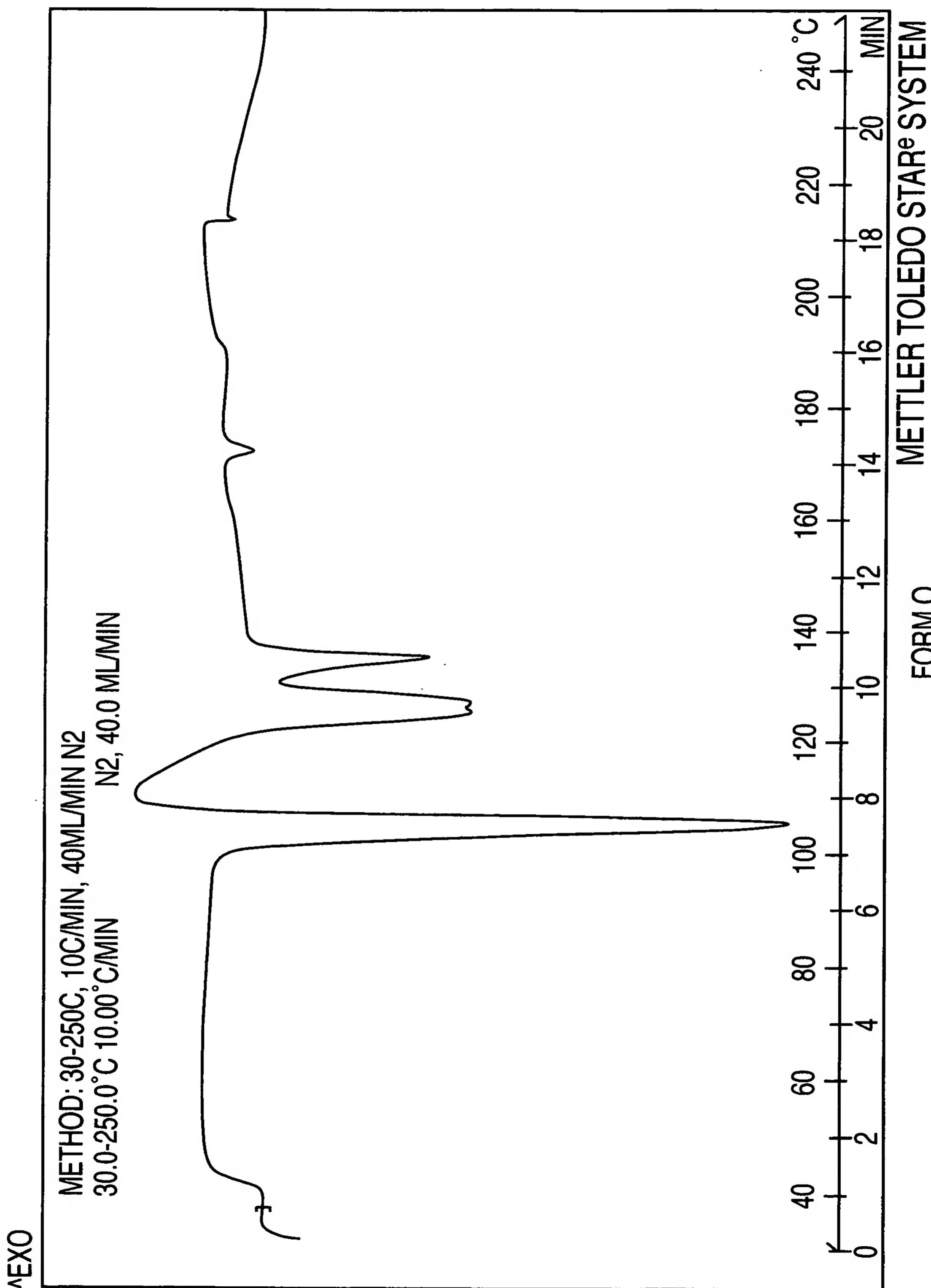
44/64

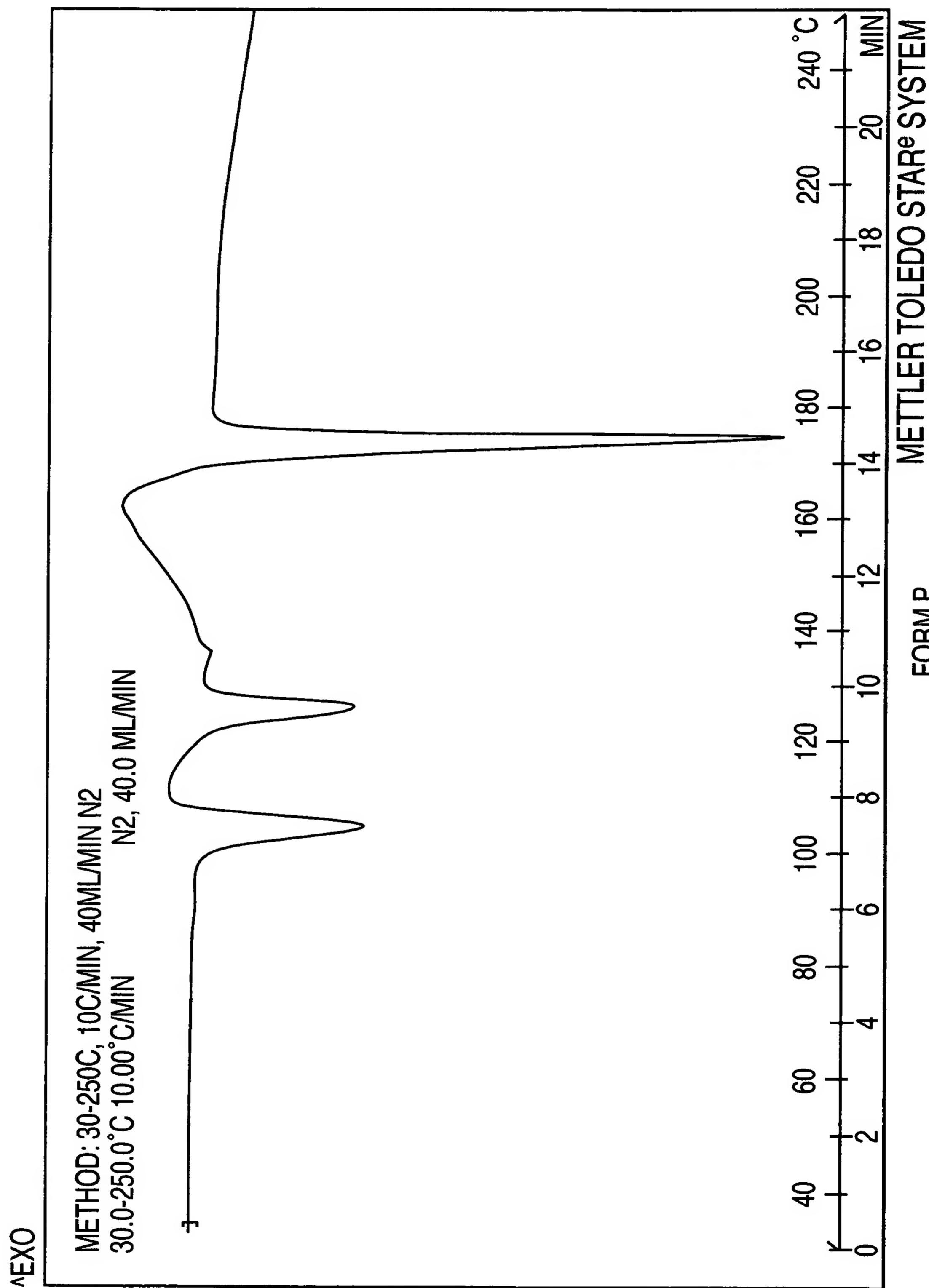


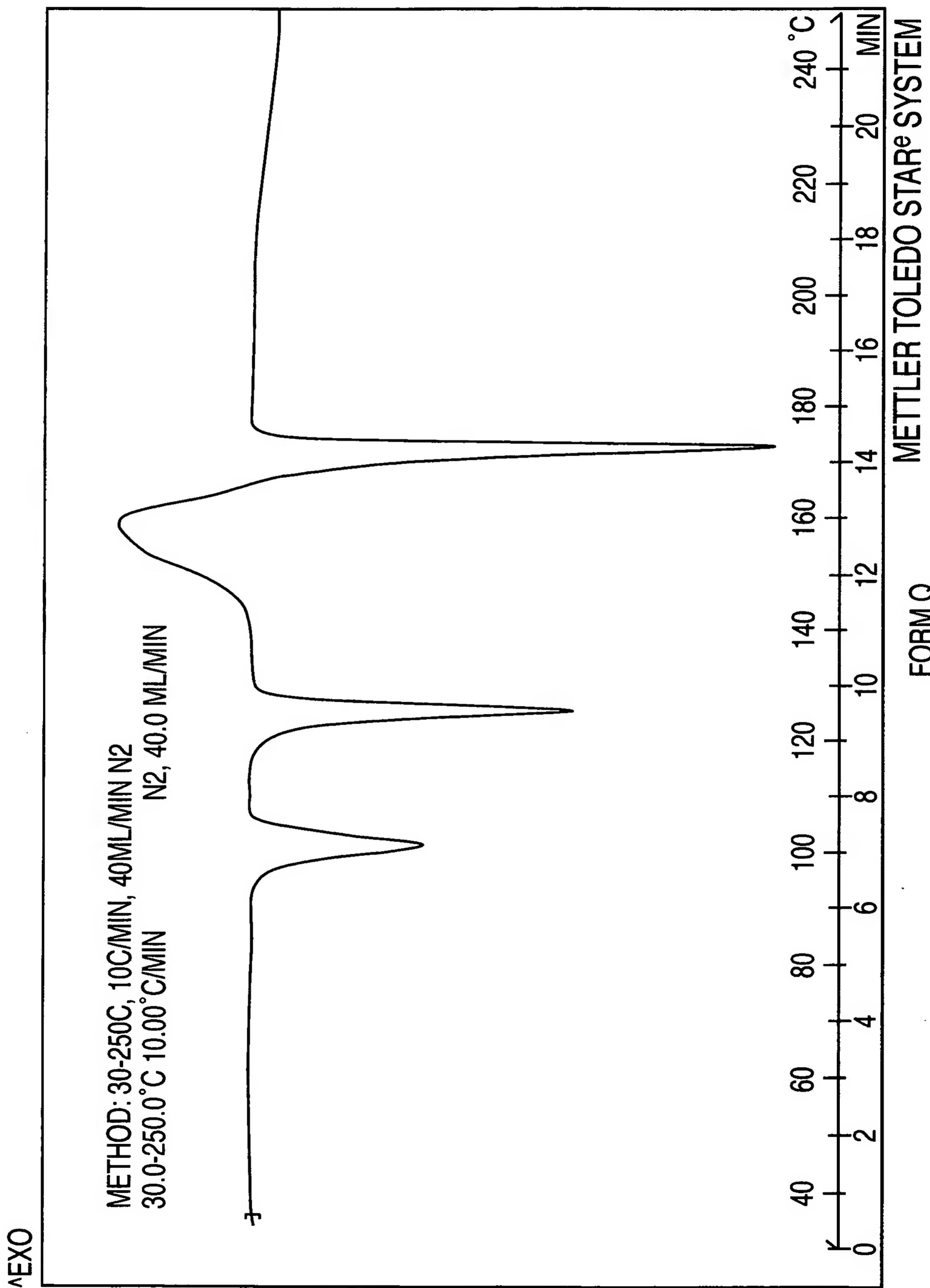
45/64



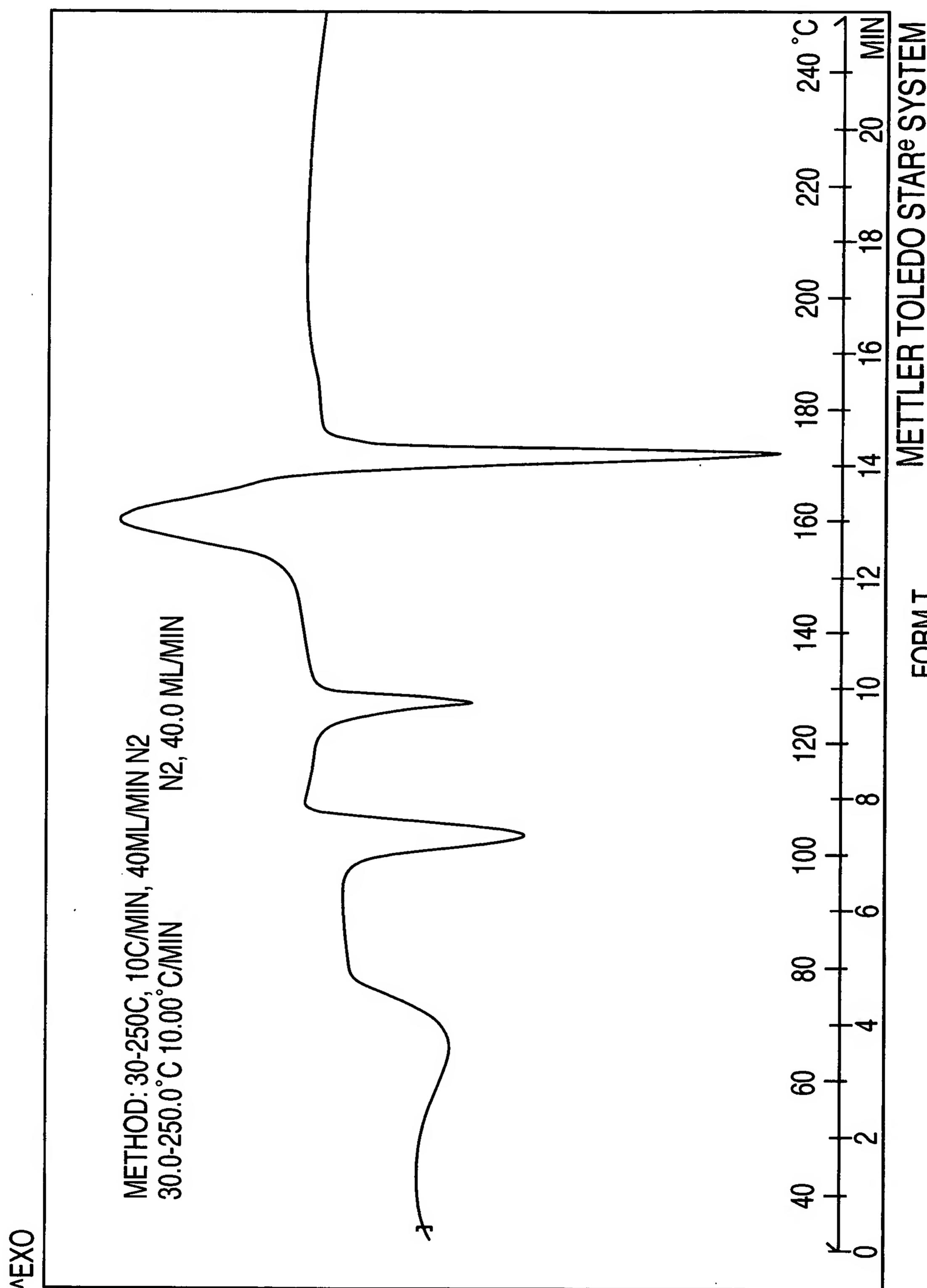


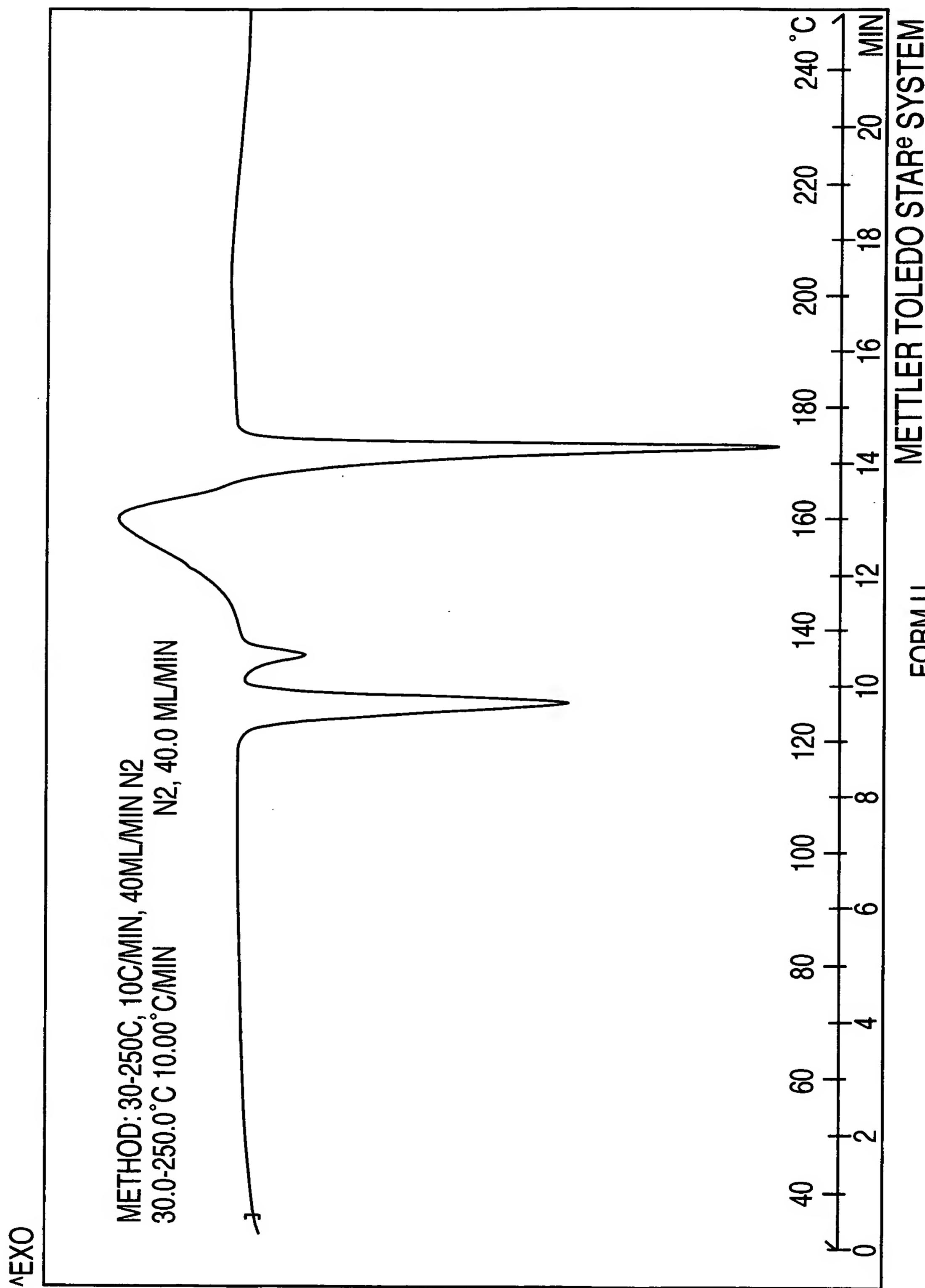




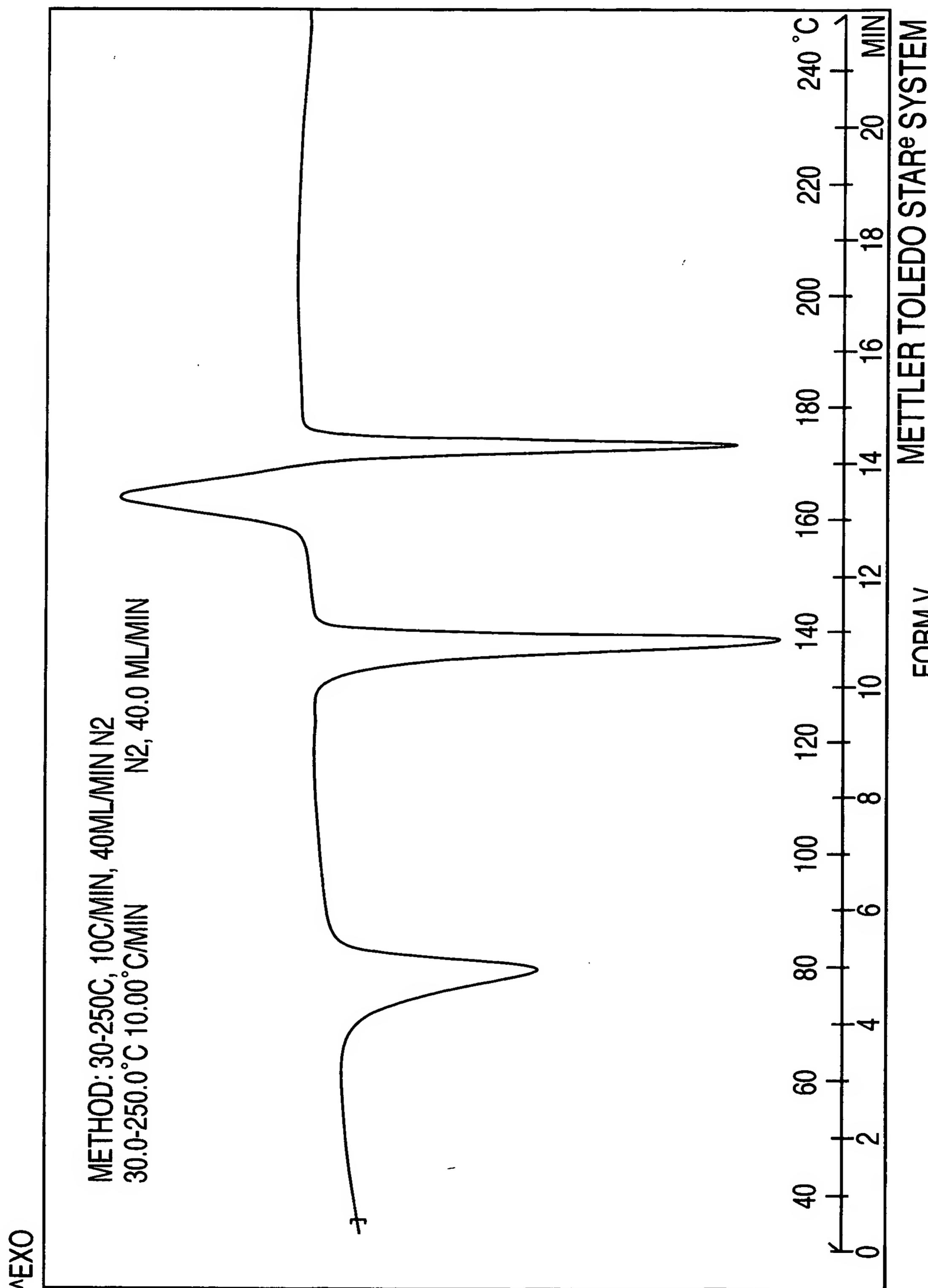


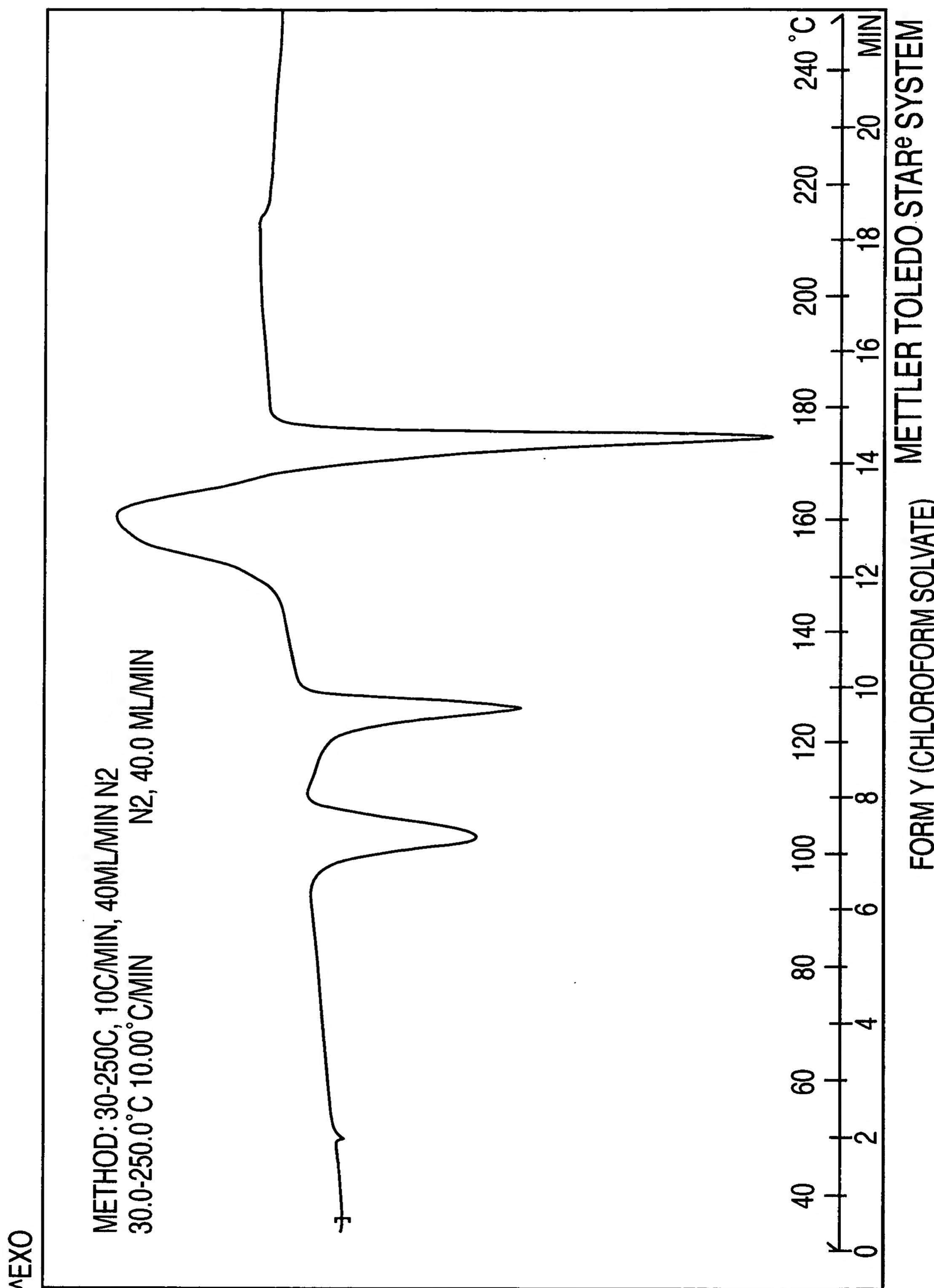
50/64

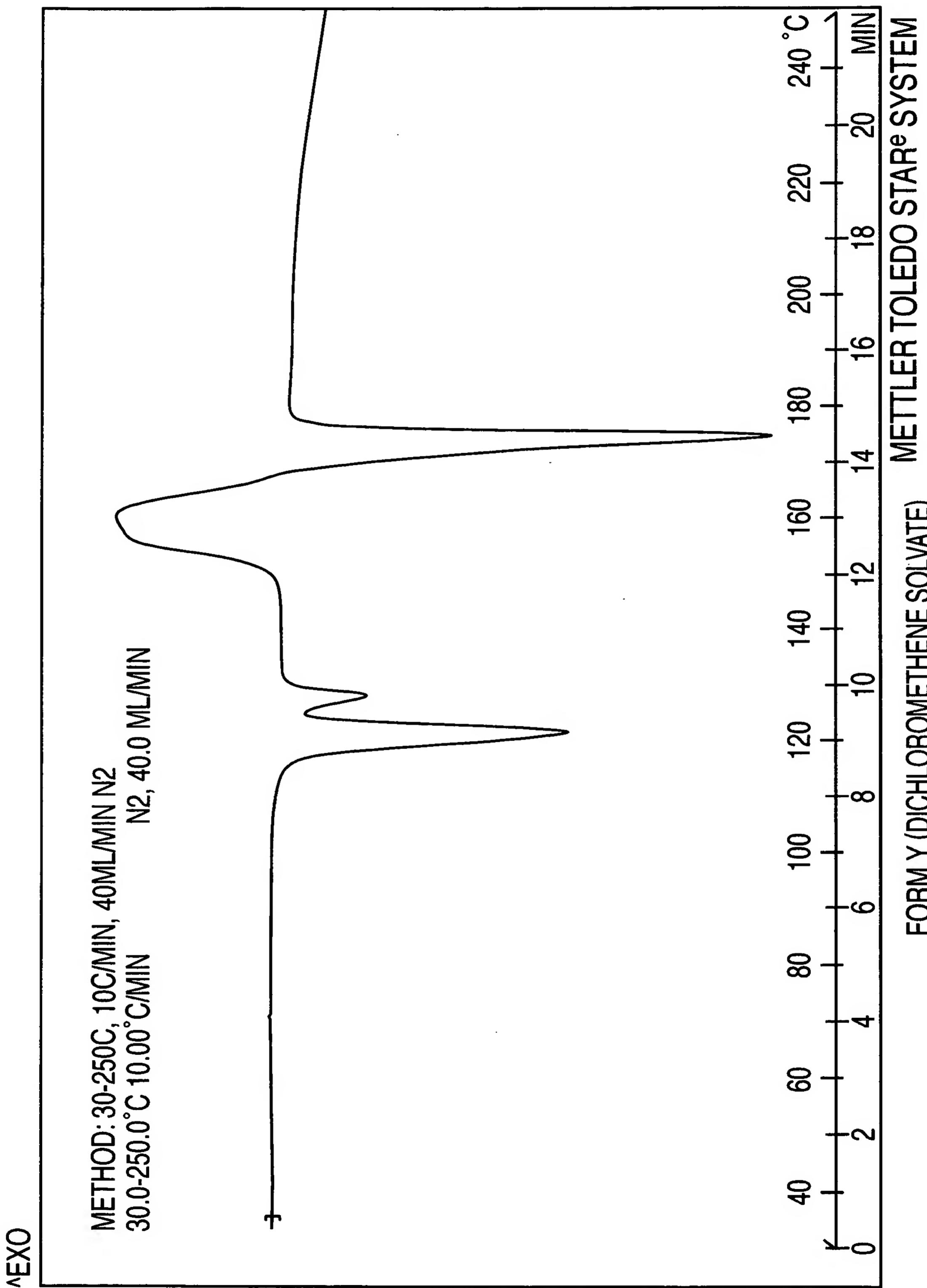


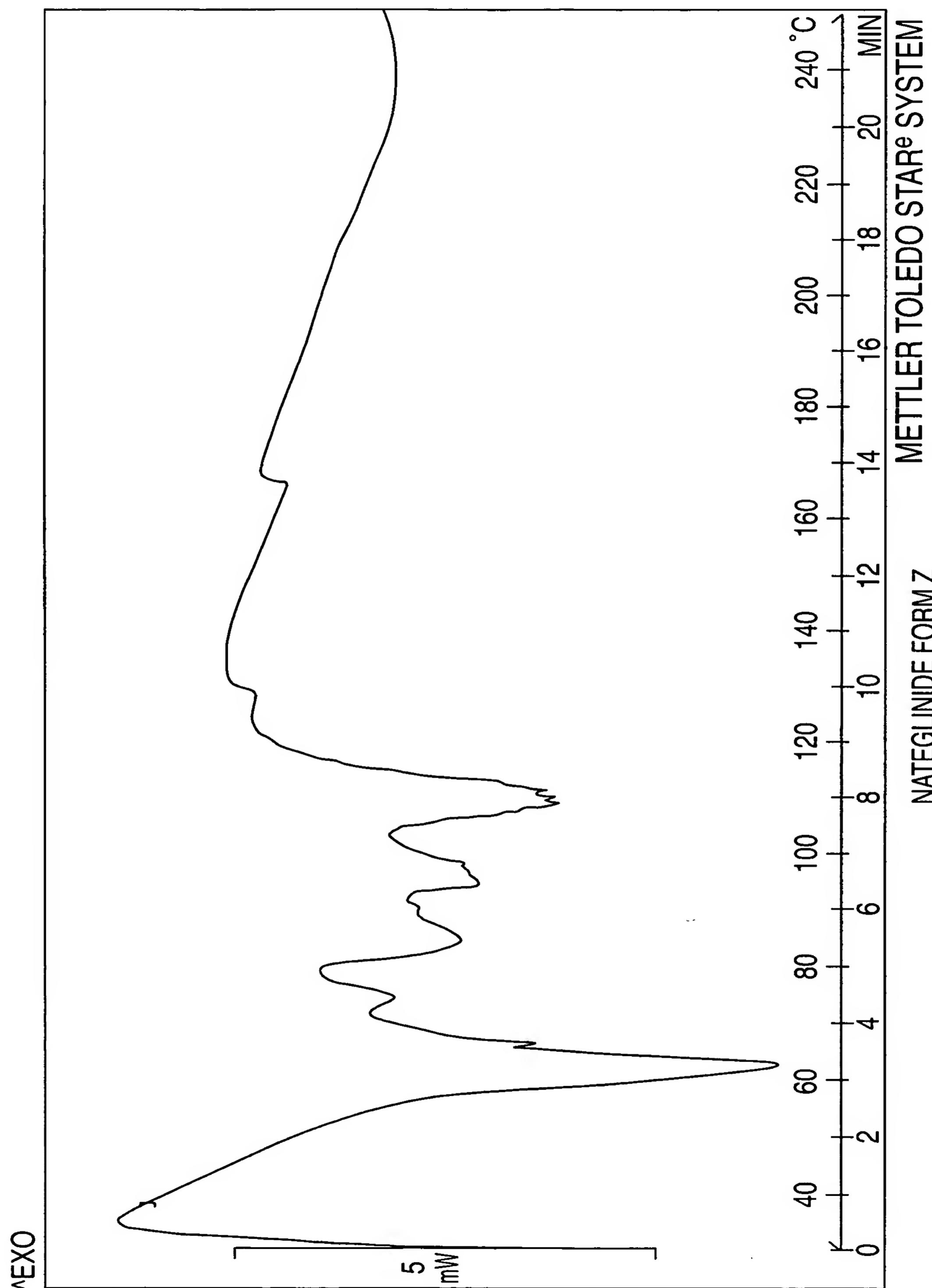


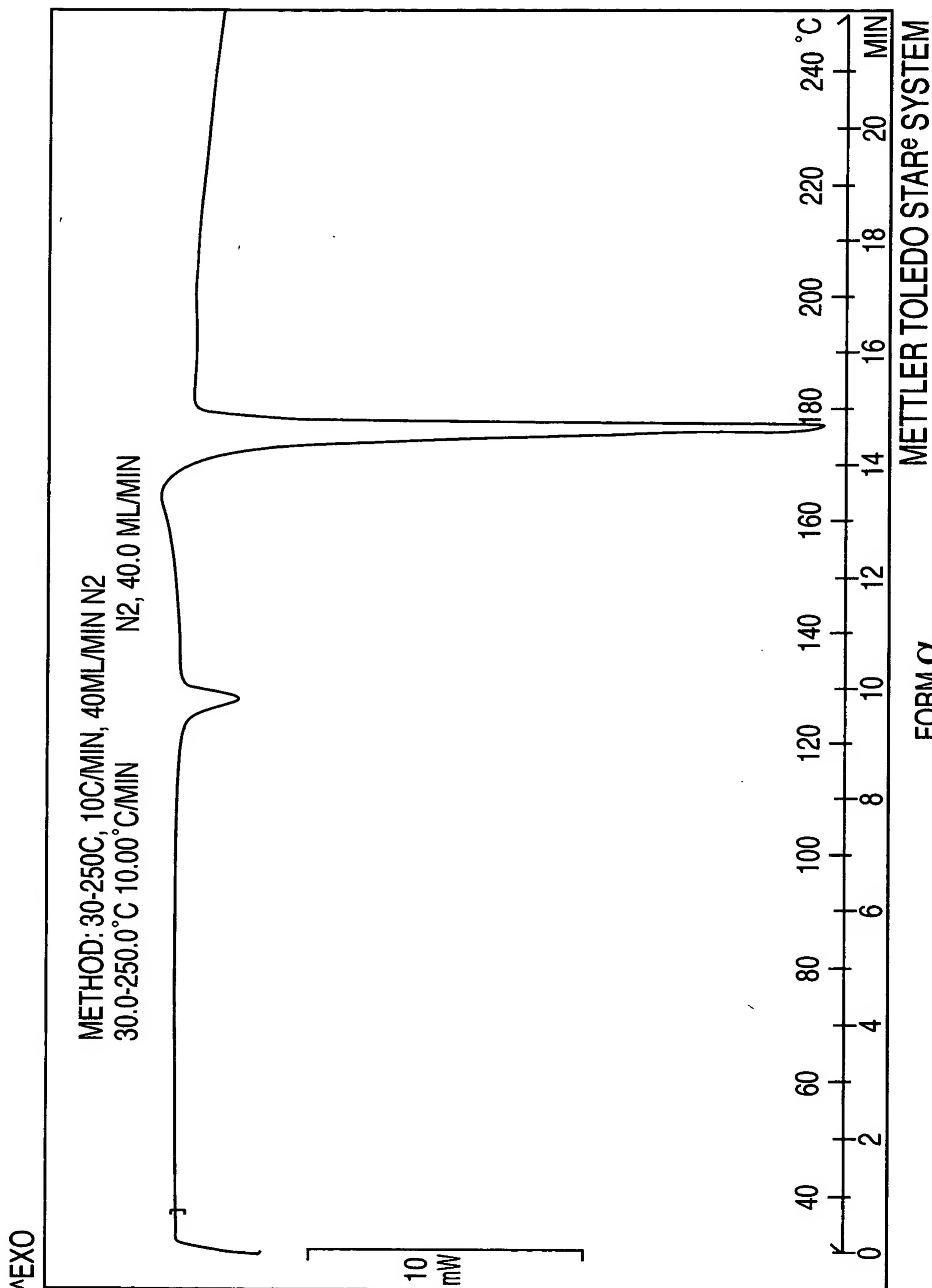
52/64



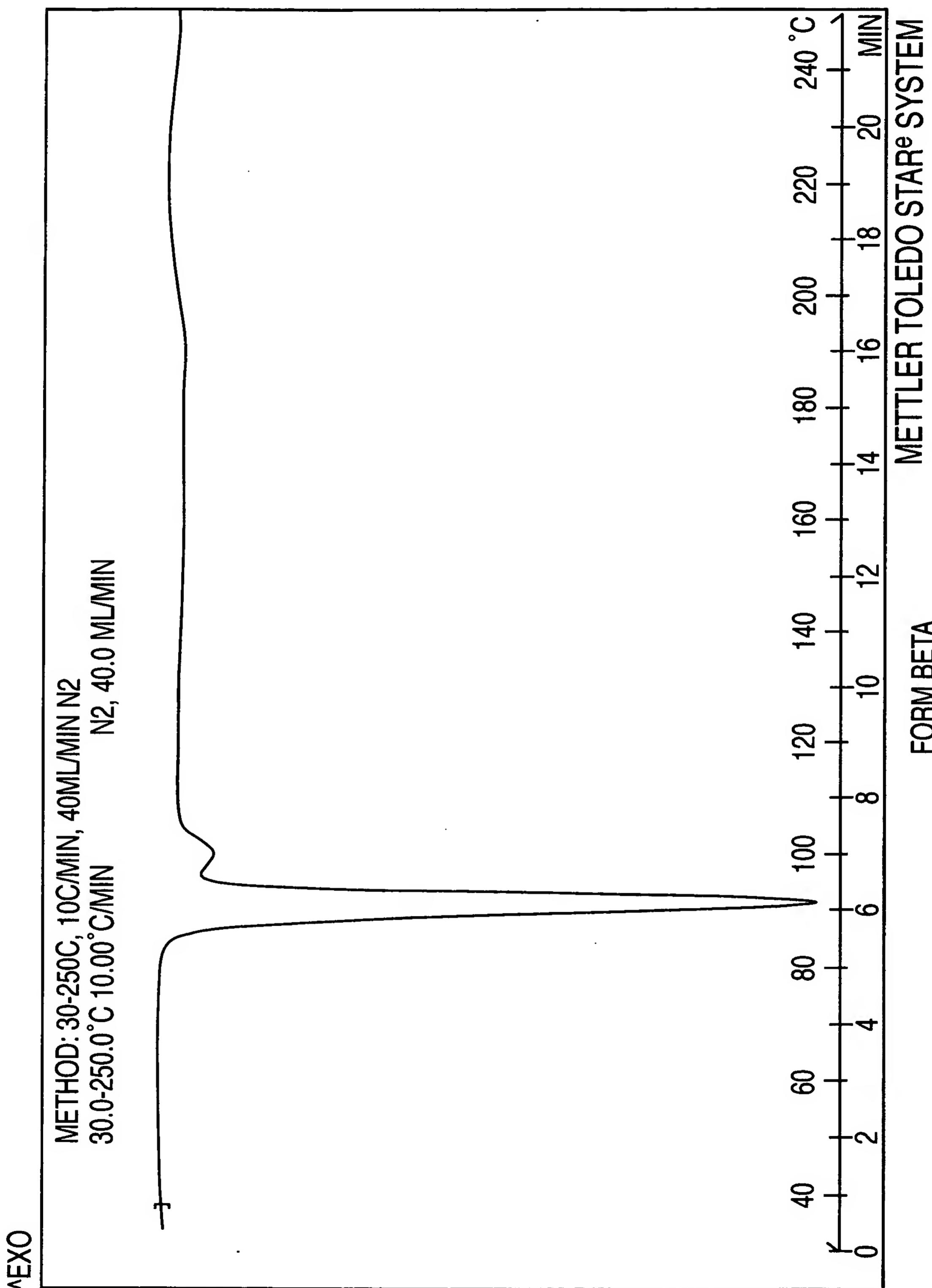




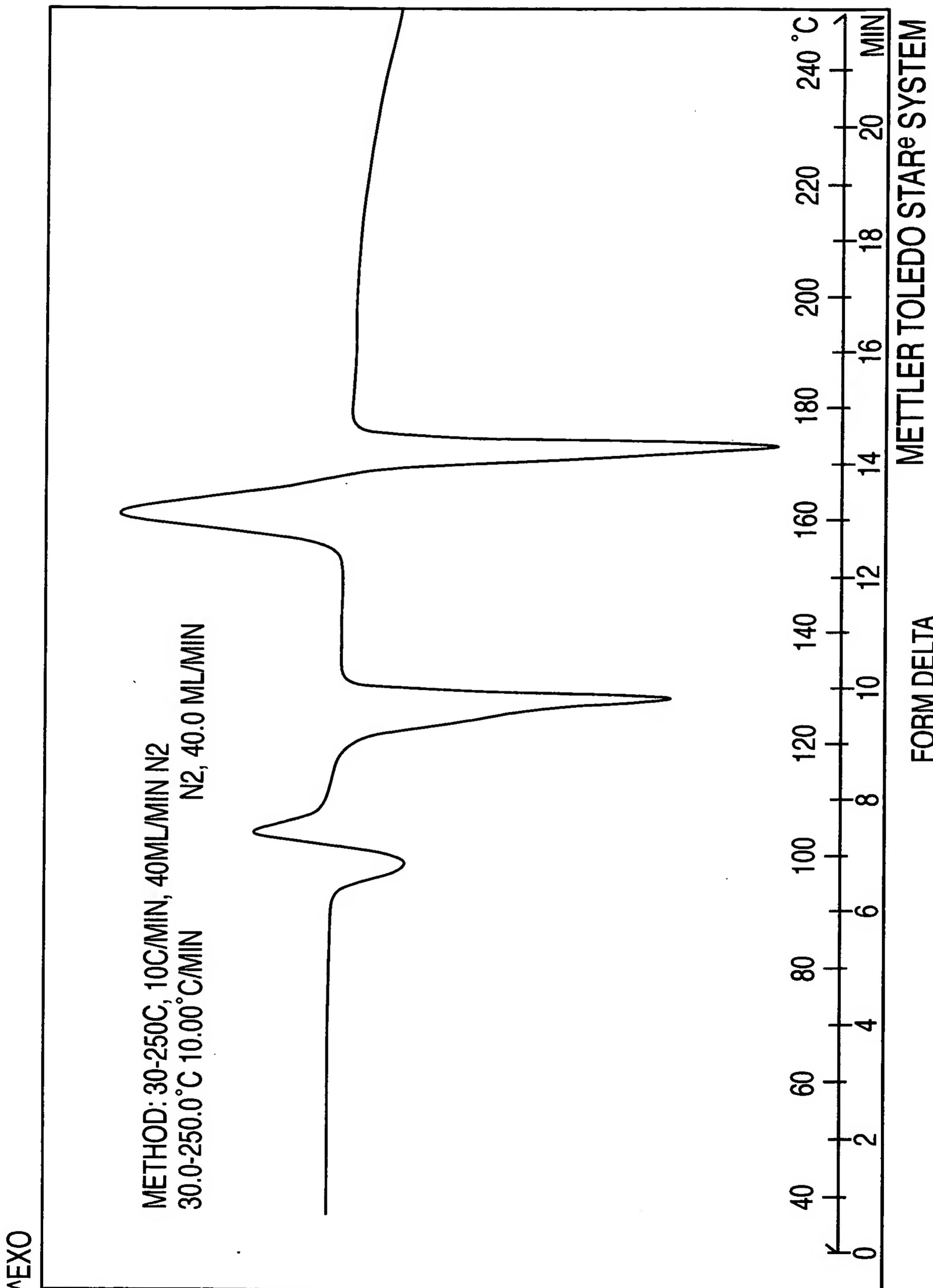


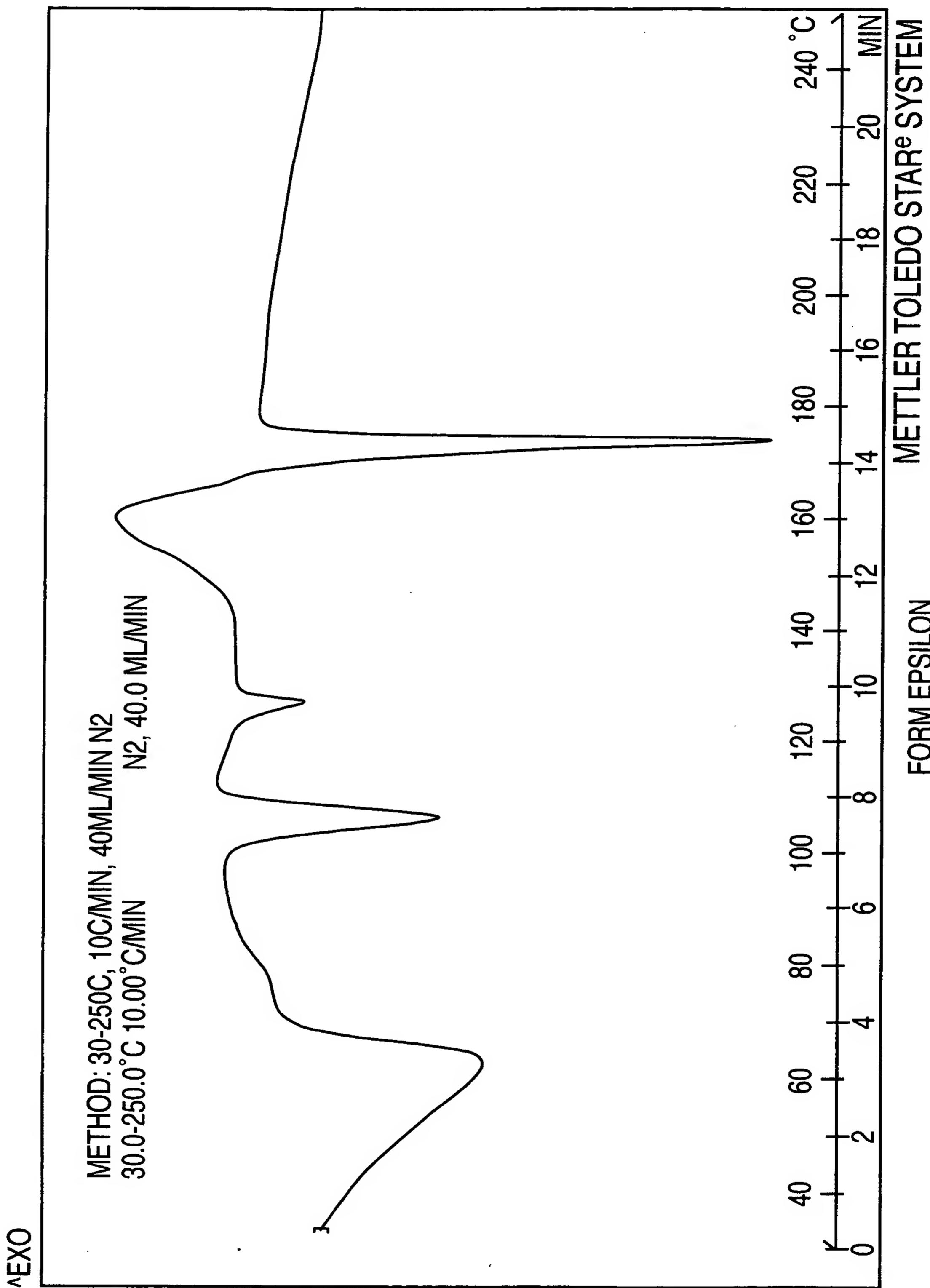


FORM  $\alpha$  FIG. 56

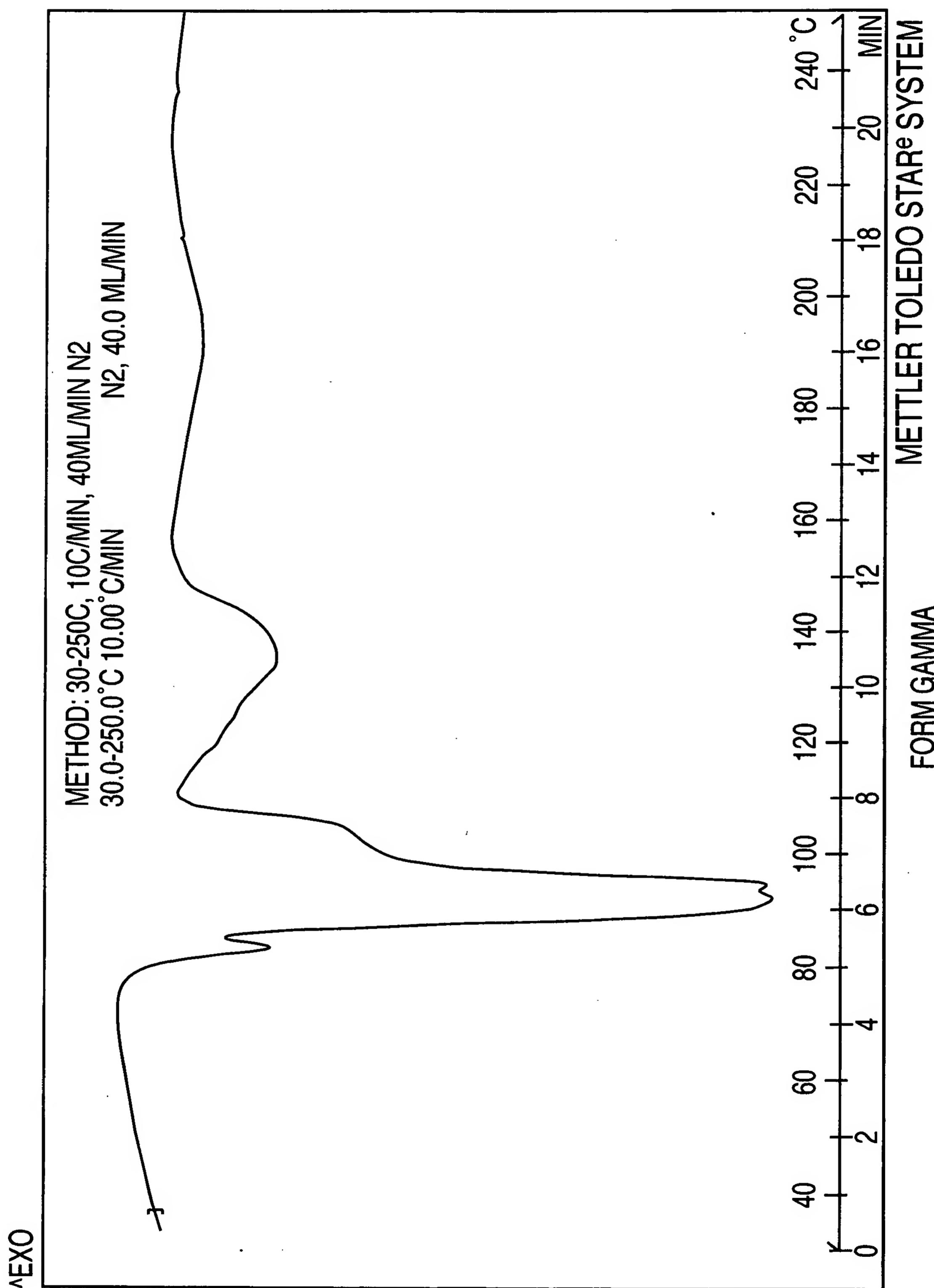


58/64

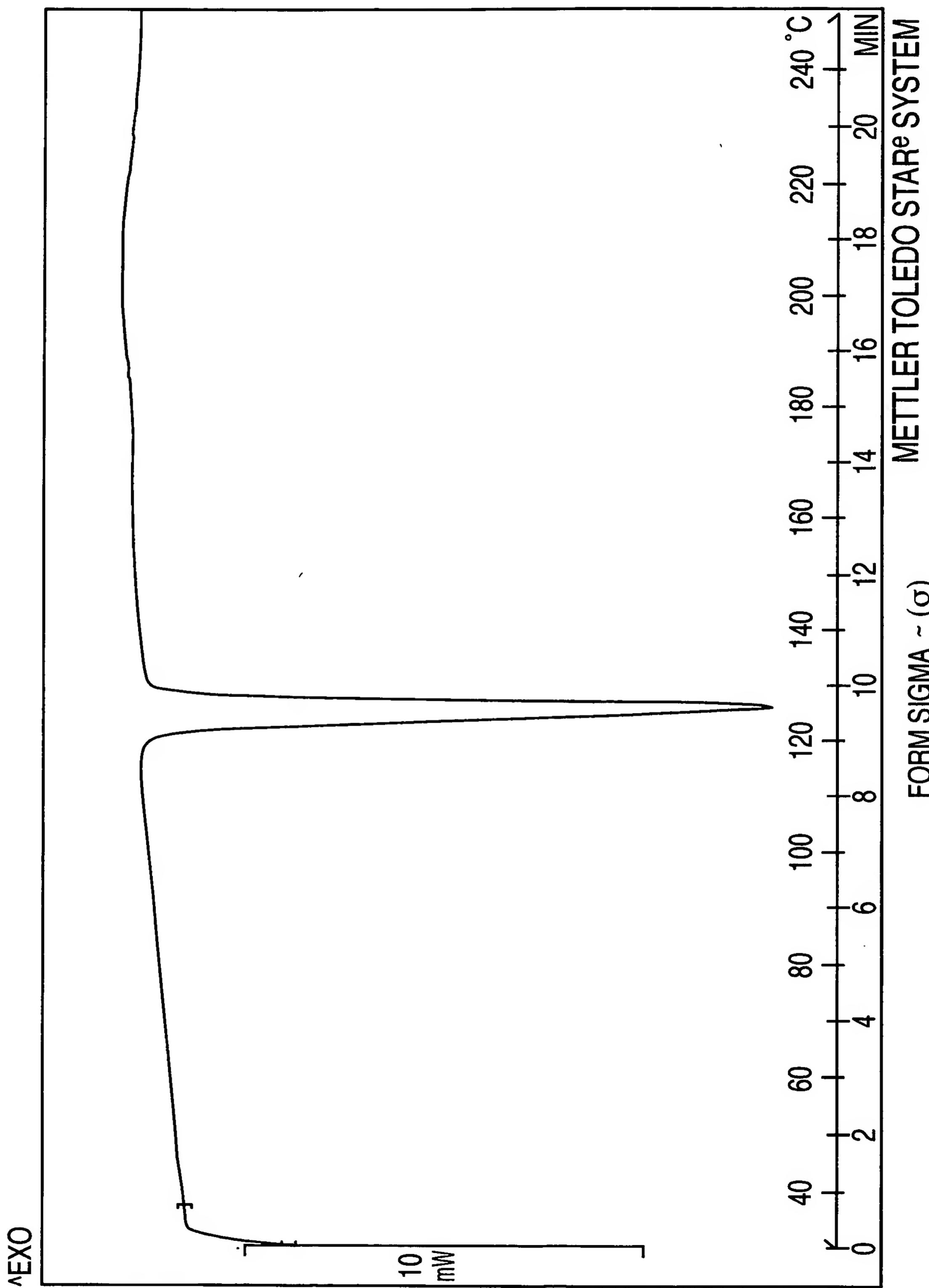




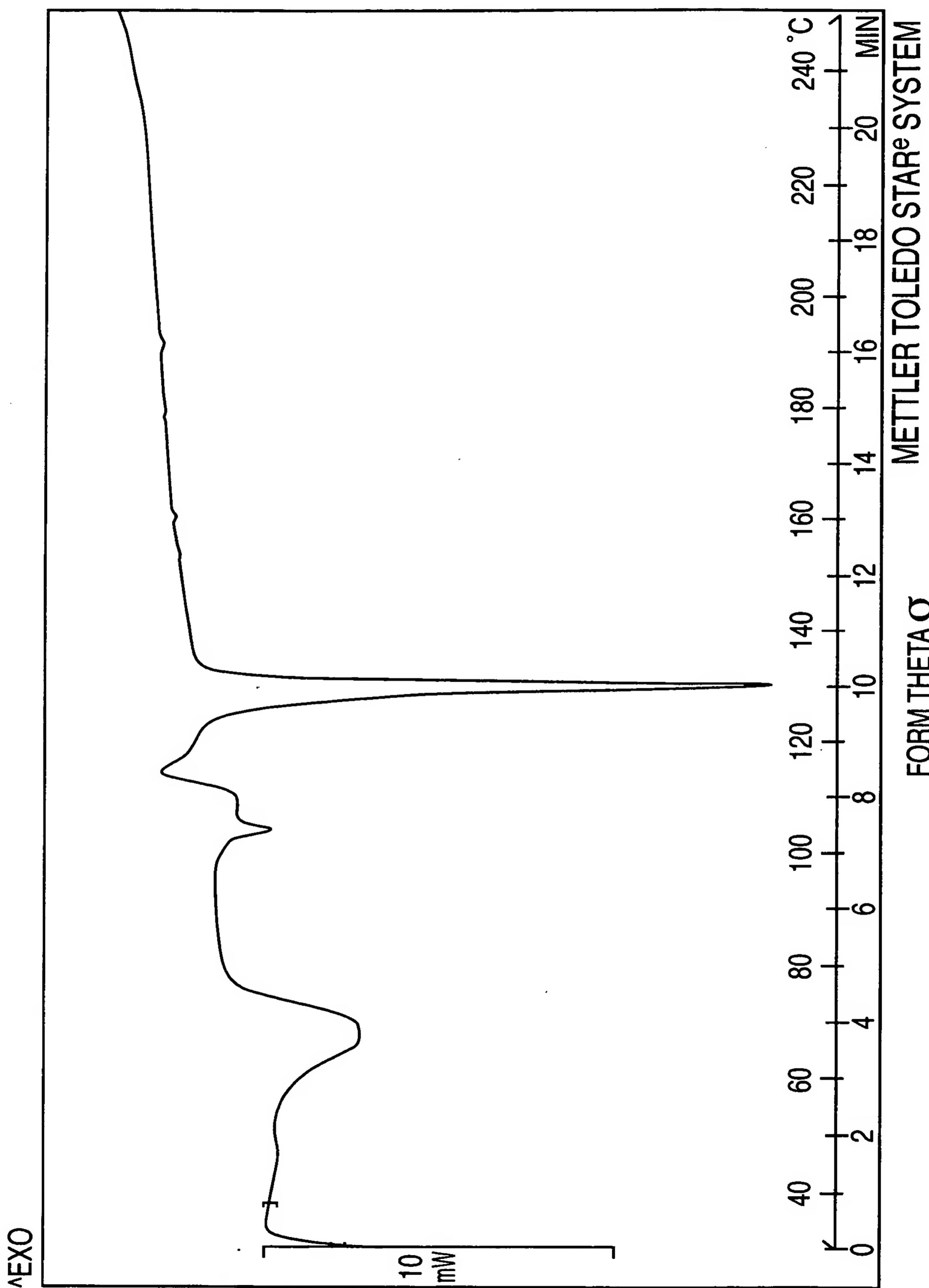
60/64



61/64



62/64



63/64

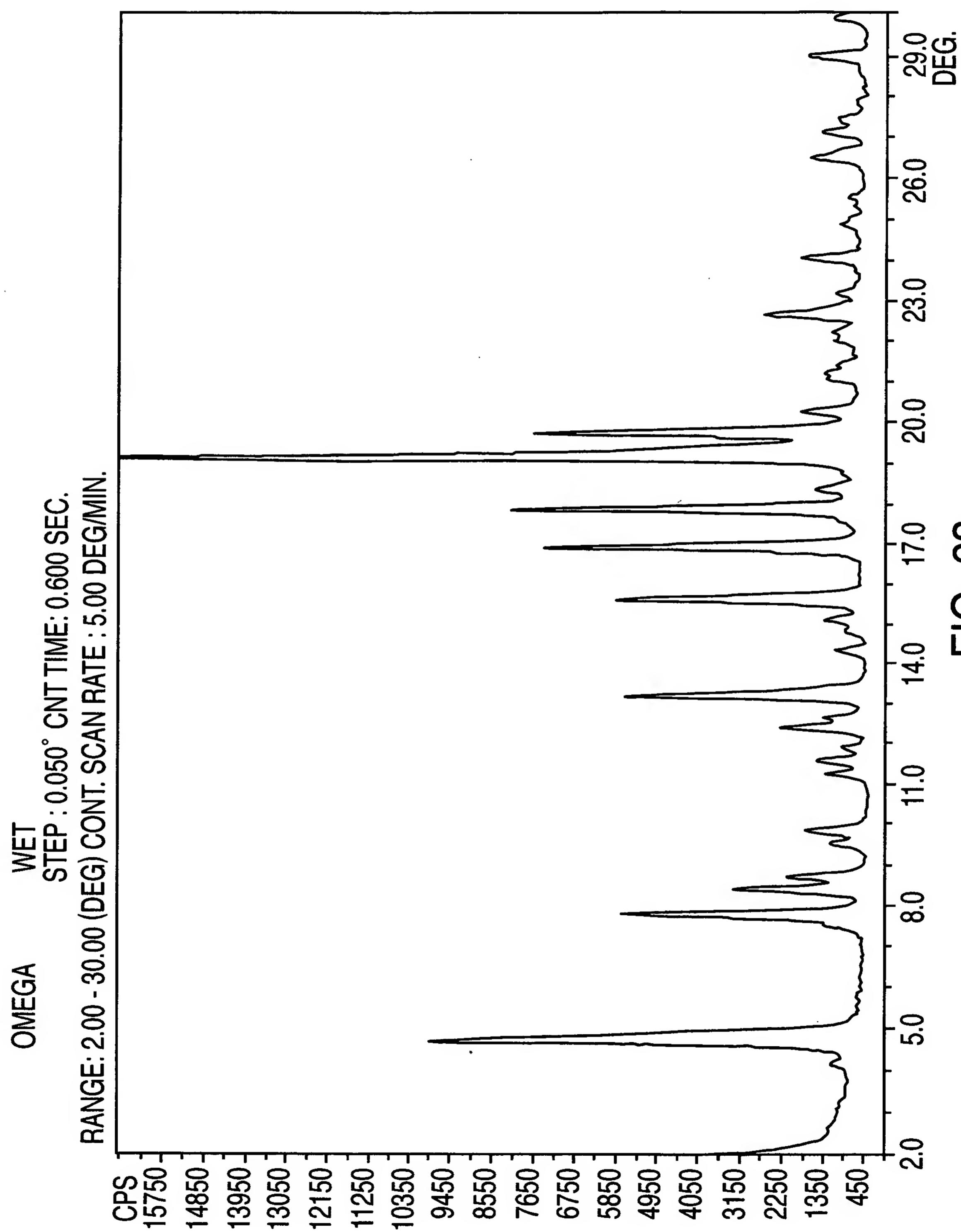


FIG. 63

64/64

Comparison between the impurity profile of Nateglinide crystallized in IPA-H<sub>2</sub>O and Nateglinide in Methanol-H<sub>2</sub>O

Sample No	Solvent	Impurity profile by RRT [% w/w]					
		D-PA (0.25)	(0.46)	(0.80)	Ipcha (0.89)	Dimer (1.38)	Methyl Ester (1.51)
RL-2155/1	Methanol-H <sub>2</sub> O	<0.01	0.02	<0.01	0.03	0.02	2.91
RL-2163/4	IPA-H <sub>2</sub> O	<0.01	0.04	0.02	0.02	0.01	0.03

Note: D-PA means D-Phenyl Alanine

Ipcha means Iso propyl cyclohexyl carboxylic acid

Both are the starting materials of the product

(-)-N-[*(trans*-4-isopropyl cyclohexane)carbonyl]-D-phenylalanine

FIG. 64